This is a digital copy of a book that was preserved for generations on library shelves before it was carefully scanned by Google as part of a project to make the world's books discoverable online.

It has survived long enough for the copyright to expire and the book to enter the public domain. A public domain book is one that was never subject to copyright or whose legal copyright term has expired. Whether a book is in the public domain may vary country to country. Public domain books are our gateways to the past, representing a wealth of history, culture and knowledge that's often difficult to discover.

Marks, notations and other marginalia present in the original volume will appear in this file - a reminder of this book's long journey from the publisher to a library and finally to you.

Usage guidelines

Google is proud to partner with libraries to digitize public domain materials and make them widely accessible. Public domain books belong to the public and we are merely their custodians. Nevertheless, this work is expensive, so in order to keep providing this resource, we have taken steps to prevent abuse by commercial parties, including placing technical restrictions on automated querying.

We also ask that you:

+ *Make non-commercial use of the files* We designed Google Book Search for use by individuals, and we request that you use these files for personal, non-commercial purposes.

+ *Refrain from automated querying* Do not send automated queries of any sort to Google's system: If you are conducting research on machine translation, optical character recognition or other areas where access to a large amount of text is helpful, please contact us. We encourage the use of public domain materials for these purposes and may be able to help.

+ *Maintain attribution* The Google "watermark" you see on each file is essential for informing people about this project and helping them find additional materials through Google Book Search. Please do not remove it.

+ *Keep it legal* Whatever your use, remember that you are responsible for ensuring that what you are doing is legal. Do not assume that just because we believe a book is in the public domain for users in the United States, that the work is also in the public domain for users in other countries. Whether a book is still in copyright varies from country to country, and we can't offer guidance on whether any specific use of any specific book is allowed. Please do not assume that a book's appearance in Google Book Search means it can be used in any manner anywhere in the world. Copyright infringement liability can be quite severe.

About Google Book Search

Google's mission is to organize the world's information and to make it universally accessible and useful. Google Book Search helps readers discover the world's books while helping authors and publishers reach new audiences. You can search through the full text of this book on the web at `http://books.google.com/`

LANE MEDICAL LIBRARY STANFORD
X1001 .D91 1900 STOR
Children, acid and alkaline : The law of
24503373407

LANE

MEDICAL LIBRARY

GIFT
SHRINERS' HOSPITAL

AMERICAN BANK NOTE CO LITHO

CHILDREN,

ACID AND ALKALINE.

"Health, the Golden Mean."

The Law of Diet Selection, Contraria.

The Therapeutic Law, Similia.

BY

THOMAS C. DUNCAN, M. D., Ph. D., LL. D.,

Formerly Professor of Diseases of Children, Hahnemann Medical College, and Chicago Homœopathic Medical College.

Professor of Medicine and Diseases of the Chest, Dunham Medical College, Consulting Physician Chicago Foundling's Home, St. Anthony Hospital, Cook County Hospital, Etc.

Author of

Text-Book on Diseases of Children.

Pædohygea: The Feeding and Management of Infants and Children. How to be Plump, Etc., Etc.

PHILADELPHIA:
BOERICKE & TAFEL.
1900.

LANE LIBRARY

COPYRIGHTED
BY
BOERICKE & TAFEL
1899.

T. B. & H. B. COCHRAN, PRINTERS,
LANCASTER, PA.

X100|
D91
1900

To

Inquiring Students,

Wise Physicians, Sensible Parents

and

Statesmen of the World

This Volume is

Respectfully Dedicated.

65568

PREFACE.

The demand for more information along the line of the division of children into the three classes: (1) normal, (2) acid, and (3) alkaline, has induced the author to elaborate his ideas in a separate and convenient work.

While in New York recently he was informed that one of the Professors of Pædology in one of the regular Medical Colleges had presented this division of sick children (acid and alkaline) as if original with him. The author does not claim originality except in the elaborating the idea and demonstrating by original research that it has a pathological basis.

It will be seen by Father Hahnemann's article that he had looked upon children with a chemical eye and discovered the tendency to acidity.

The credit of dividing remedies upon an acid and alkaline basis, it will be noted, originated with Father Hering, that wonderfully, profound student of Materia Medica.

It will be observed that we assign *Contraria* a permanent place as "the rule for diet selection."

The author has freely incorporated extracts from the writings of others, and chiefly from the most profound medical philosopher of these times. It will be noted that Von Grauvogl's division of sick people (including children of course) goes down to the ultimate chemical elements of which the body is composed.

Burnett, that brilliant practical writer, sends remedies into the secret recesses of nature's biological laboratory and the results—they revolutionize peoples. The possibility of preventing the degeneracy of coming generations is here foreshadowed.

Physicians are conservators of the race and can be statesmen of the highest order. It is also wisely said that "she who rocks the cradle rules the world." She may, if the cradle contains the best developed children, the coming army of workers, students and rulers. That is woman's right, and power.

If the ideas here elaborated prove in any way helpful in developing a healthier, happier humanity, none will be more thankful than

THE AUTHOR.

100 State Street.

CONTENTS.

Introduction 1
How the Idea Grew.
Acid vs. Alkaline Children 1
Original Researches.
General Appearances 22
How the Tendency Develops.
General Causes 24
Special Etiology in Each Class.
Pathological Peculiarities 29
Disease Manifestations in Each.
The Food Problems 32
Contraria, the Law of Diet Selection.
Hygienic Directions 43
Management of Acid and Alkaline Babies.
General Remedies Indicated 48
Similia, the Therapeutic Guide in Both Classes.
Hering's Classification of Drugs 53
Chemical and Electrical.
Special Therapeutic Outlines 59
Leading Acid and Alkaline Remedies.
Grauvogl's Constitutions 80

Hydrogenoid and Oxygenoid.
Hahnemann on Children 88
Visit to a Nursery.
Congenital Malformations 87
Antenatal Medication for Defects and Diseases.
How to Improve the Race 127
A Study of Peoples, Differences, etc.
Child Study 137
Index 143

INTRODUCTION.

Classification is one of the triumphs of the century. The little folks are grouped into infants and children. They may also be divided as to temperaments into nervous, sanguine, bilious and lymphatic. In these may be recognized two divisions. Away back in 1873 it seemed possible to classify children as to their digestive organs, and this view was evolved in a paper read before the Illinois Homœopathic Medical Association in Chicago under the caption of "Acid vs. Alkaline Children," and given to the world in the *Medical Investigator* that year.

Said a professor the other day: "If you will only give us your ideas of acid and alkaline children, with the indications for food and remedies, in a few pages for ready reference you will confer a favor." It was explained that he would find the subject elaborated in the author's large work,* and also in his smaller popular work.† "Yes, I know, but we want it more fully considered so that we can get at the ideas and indications without much trouble." The practical

*Text-Book of Diseases of Children.

†Pædohygea or Feeding and Management of Children.

value of this division of children has been recognized by our best men. Said a prominent physician of a neighboring state, who is recognized as a close prescriber: "I am classifying our remedies on that basis (acid and alkaline) as I find that it facilitates their selection and I wish that you would carry the ideas out farther."

Part of the ideas here outlined are not new with the author, for away back in Hahnemann's day we find that he recognized the fact that the tendency to acidity was constant and abnormal. (See visit to a nursery.)

In attempting to find Grauvogl's constitutions (Oxygenoid, Carbo-nitrogenoid and Hydrogenoid) among the children in the newly organized Chicago Foundlings' Home two extremes could be well made out. These were the thin, feeble children and the large, plump ones—corresponding to the description of the first and last division of Grauvogl's constitutions.* Scudder in his work on Specific Medication has emphasized the idea of Thorne, that for acids to be of value the lips must be red; while the alkalies should be used when the lips are pale. This corresponded to the two classes of children already recognized. The acid children have red lips while the alkaline ones were found to have pale lips. Here was evidently a physiological basis for the application of the law of similars in the selection of the remedy.

* Text-Book of Homœopathy.

Now was recalled the division of drugs according to their chemical and electric action as outlined by Dr. Hering in 1850.* Here was a scientific basis for a division of remedies, but how would they apply to the classification of children.

After making many post-mortem examinations on these two classes of children in a large public charity the following observations were established: 1. A *large distended stomach* was invariably found in the thin subjects, while in the large, very fleshy ones the stomach was relatively *very much smaller.* 2. The small thin child with a large stomach had a *very small mahogany looking liver;* while in the large, fleshy child *the liver was large, well developed.*

The child being a vegetative being, growing on what it is fed and assimilates, it is evident that as the large stomach would secrete a large amount of gastric juice, strongly acid, in such cases, if the bile flow was deficient, digestion and nutrition would be interfered with. For we remember that there is a natural tendency to acidity in the child. Acidity means decay. We also recalled the fact that all of the *excretions* in infancy have an acid reaction; while all of the secretions but two have an alkaline reaction.

Following these leadings and recalling the fact that the strong acids are homœopathic to the low forms of disease where the body is emaciated (*e. g.*, *Muriatic*

* North American Journal of Homœopathy, Vol. I, p. 41.

or *Hydrochloric acid* in typhoid fever), and that the red lip children and people were usually poor in flesh, slender, first suggested that the acid subjects were below par. Could we also say that all thin subjects were acid, or, in other words, that in such children and people the acid digestive organs were in preponderance? It would seem so.

On the other hand, it was observed that as a rule the pale lips belong to children and people in good flesh and some of them extra fat. A healthy child or person has rosy lips. It was found that the thick, lipped children were ailing most frequently. Then it was concluded that there must be a diseased alkalinity as well as acidity. Extremes either way were finally looked upon as disease tendencies as will be seen.

The conclusion was reached, after long and careful observation and study, that there was an anatomical, physiological, chemical, pathological, dietetic and therapeutic basis for this division of sick children into acid and alkaline. The golden mean of health is neither extreme. The effort of the physician in the management of children should be to obtain and maintain this golden mean.

Acid and Alkaline Children.

ORIGINAL RESEARCHES.

When called to treat a child, one of the most important questions I settle is whether I have an alkaline or an acid child to manage.

Such a division of children's cases may seem singular and possibly visionary, but let us glance at the digestive development of the infant body and the changes that undergo in the working of human naure's laboratory.

It seems that in a healthy child the alkaline digestive elements are in preponderance; then slowly the acids obtain sway so that when it reaches manhood these elements hold the ascendency. In a normally healthy person it is believed that these steps should be retraced, and we have an aged alkaline body. Let us see if this is not true, at least of the infantile part of life.

If we go on a voyage of discovery down the alimentary canal of an infant the first stream we meet of any size and activity is the biliary. There is no saliva until about six months of life. The stomach is not extra active. The gastric juice is just sufficient

to acidify the milk. The intestinal acid glands are not yet called into activity to any great extent. The chief active organs are the secretory liver and pancreas and assimilatory lymphatics.

The liver at birth in health occupies more than a third of the abdominal cavity. The stomach is found tilted up under the ribs on the left side and the succulent duodenum is quite as important as the stomach —the infantile digestion is chiefly intestinal. The amount of work the infantile liver has to perform is enormous, as the bile stream has to emulsify and saponify the large amount of milk taken by the child to get it ready for absorption. This biliary flow has a double alkaline reaction and gives alkalinity to the whole system, and this alkalinity is, or should be, the normal condition for many years. *Acids and cold are the infant destroyers.*

The chemical composition of the bile, as far as ascertained, is the cholate and taurate of soda (biliverdin, bilirubin), cholestrin, etc. When the soda base is lessened, naturally, artificially or accidentally, as in disease, we have then two irritating acids glycocholic and taurocholic acids liberated high up in the alimentary canal. Cholestrin is the debris of the nerve fat, and no doubt aids the emulsifying of the milk fat. Biliverdin and rubin give color to the bile derived from the coloring matter of the blood.

The reaction of the pancreatic juice is strongly alkaline, due to the presence of sodium carbonate. It

also contains much albumin, sodium chloride and lime.

The food of the infant, mother's milk, is, we know, normally of an alkaline reaction. Aside from the water, butter and sugar of milk we have also casein with salts of potassium, soda and lime to digest and absorb.

The next set of glands that come into activity is the salivary. This also has an alkaline reaction, as do also the intestinal juices. The base of the saliva is supposed to be the sulpho-cyanide of potassium. Thus we see that about the sixth month, when the teething process is active, that the alkaline secretions are reinforced. It is found by Prof. Sonsina that a child cannot completely digest starch until it is over ten months of age.

The next epoch in the child's life is when it is able to take and digest meat. Now the liver is relatively smaller, the stomach lies more horizontal, its transverse and longitudinal fibers are better developed and the amount of hydrochloric acid secreted increases as age advances. The intestinal juices (colonic) become more and more acrid. To correspond to this change the mother's milk becomes more saline. Finally we reach the period when the stomach is the chief digestive organ in the body. This is the natural order, but it may be easily changed or deranged at any point and serious results always follow.

We see that, chemically speaking, the healthy child is alkaline. Externally it presents a plump, rosy ap-

pearance, feeds heartily, sleeps a major portion of the time and wakes to crow and laugh. It is healthy and happy, and would grace the arms of any proud Madonna—a pleasing subject for an artist's pencil. It teethes easily and develops without a struggle. It has been my fortune to make autopsies at the Foundlings' Home on some of these healthy and wealthy infant children that have died suddenly from meningitis, overlying, or from a bottle of sour milk. The stomach is small, the lesser intestines narrow, the liver large, the large intestines capacious and every part well cushioned with fat, stored up for the future as well as present great demands upon the system.

This natural order of developmental activity may be totally and permanently deranged. If not fed properly the acid mucus of the mouth may increase and so reinforce the gastric secretion that the milk is curdled rapidly into solid masses which the bile cannot emulsify. The excessive acidity exhausts the soda base and liberates the bile acids, which swelling the acid contents, generates colic and distress everywhere. The milk given the child may be neutral or acid, if the mother is spare, or, if it is cow's milk, so very acid as to develop acidity high up in the alimentary tract. In either case digestion and development are arrested.

While the alkaline child is a plump, healthy one, the acid child is quite a different subject; whether the acidity is induced by the first dose of sweetened

water, or subsequently by negligence, thin milk, or dandling, the result is the same. It is thin, scrawny, cross and sours all those who have to care for it, and ruins the reputation of babydom. It nurses, or would nurse constantly, cries and squirms incessantly, vomits occasionally and its bowels are always out of order. Its teeth are cut with difficulty, its intestinal irritation is often interpreted as worms and then it is the victim of vile drugging. It is a lifelong invalid, and everyone feels that it is a mercy when it is gone, whether this is in infancy, during teething, at puberty, or at maturity. The post-mortem appearances of an acid child are the opposite of those of the alkaline child. The stomach is large and usually distended with food, the liver shrunken, the body is anæmic, while the absence of fat everywhere is noteworthy. The brain is especially anæmic and shrunken. Malnutrition is evident everywhere.

There is a *diseased alkalinity*, as well as a diseased acidity. The tendency may be too much fat; the system may be clogged, giving a feeble, bony and muscular development, thus rendering the child a prey to obstructive diseases—another class with different symptoms.

APPEARANCE AND DEVELOPMENT.

How the Tendency Develops.

The *normal* child is alkaline and should be of fair size, weighing at birth about nine pounds. It should have firm flesh, well-developed bony system, broad shoulders and head, appear well nourished, cry lustily when hungry, eat heartily and sleep soundly when it has nursed about half a cup of milk.

The *acid* child is under weight. It is thin in flesh, and the bones are small and short. Those of the head are deficient, and the sutures are all open. The face is narrow and the features are pinched. The lips are thin and red. The tongue is small, red, and pointed. The skin of this child at birth is very red, harsh feeling, and delicately thin. As it grows older the skin becomes pale and has a parchment feel.

The excessively *alkaline* child is usually overweight and large every way. The flesh is flabby. It has large joints and long, large bones. The head is broad and the sutures well closed. The fontanelles may be wide open or will appear so as it develops. It cries lustily when aroused, but grunts usually until its wants are supplied. It eats heartily and often, and sleeps at first a great deal, until it is finally kept awake by its developmental tendency.

DEVELOPMENT OF EACH.

The *development* of these three classes of children is radically different. The normal child is alkaline and remains so, for the alkaline digestive elements are in a normal relation to the acid elements. That is, the bile and pancreatic juices are able to change the reaction of the acid digestive current as it comes down from the stomach.

The *acid* child, with its large stomach and excessive flow of acid gastric juice, and deficient bile and pancreatic fluid, has to struggle with acidity high up in the alimentary tract. This acidity of the digestive mass irritates the intestines, producing muscular contraction and rapid emptying of this canal. Its stools are, therefore, thin and green from the decomposed bile. Under such circumstances it is easy to see that the absorption must be deficient, and therefore the child is feebly nourished. This is evident in the emaciated, hungry look it presents. It is uneasy, restless and sleepless; cries with colic from the irritation of the acid elements high up in the small intestines. It is nourished chiefly on the fluid elements of the food that are taken up by the capillaries, consequently its blood is deficient in white or fat blood. We find not only that it is feebly nourished and imperfectly developed, but that this acid child has a marked tendency to certain diseases. The cases of patulous foramen ovale I have seen have been in nervo-

sanguine (acid) children. This is due to deficiency of fibrous tissue, whose source is the lymphatic glands.

The *alkaline* child, having a small stomach and a well-developed liver, has an ample digestive capacity. The acid milk is digested, emulsified into chyle, which is rapidly and readily absorbed. This leaves a craving of the system for more food, and the tendency is to eat too often. Notwithstanding this child's bowels are inclined to constipation, while the system is being excessively nourished. The child grows more alkaline and restless from repletion. We have here a practical illustration that those who eat heartily do not need the sleep of those who eat properly. This child is tardy in its nervous and bony development. It is late in getting its teeth, seems sleepy and slow of comprehension, and is especially tardy in walking. It is usually good-natured, a great pet, and likes to be carried on the arm. The heat on the back, it is believed, aids the digestive activity. It is very sensitive to pain and neglect, and cries at trifles.

GENERAL CAUSES.

Special Etiology in Each Class.

As the child is dependent upon its environment and food for its development and growth, so the cause of these two classes of children can be found in their ante-natal and post-natal nourishment and care.

The cause of the tendency to acidity in the child is hereditary and acquired. The thin, active, restless, nervous mother is apt to have a child feeble in development and with a tendency to acidity. If the mother's food has been deficient or largely acid or acid forming, the effect upon the child will be to produce the acid constitution. Such a course of diet may render labor easy, but the effect upon the child is disastrous. This class of food, as Dr. Burt, myself and others have found by careful observation and experiment, will cause easy labor, but the children are imperfect. Several were living skeletons and were reared with difficulty. Some were so robbed of the proper nourishment that they were born dead. The effort to make labor easy by restrictive diet is a species of starvation that takes no thought of the child. Fleshy women who grow more fleshy during gestation and lactation have, as a rule, acid children. The acquired form is developed after birth. Sometimes the trouble arises from mistaken kindness, such

as giving the new-born child—well-formed and normal —some indigestible or acid food before the milk arrives. It may be only sweetened water, and sometimes it is ill-prepared cow's milk. At times acidity is caused by starvation. The evaporation of the child tends to decompose its tissues. The milk may be tardy in making its appearance from fever and is changed, or the mother is active too early and the quality of her scanty milk is deteriorated. It may contain, like cow's milk, free lactic acid. The milk of blond women seems to undergo that change sooner than that of brunettes. The food, milk or other article may be difficult of digestion, thereby developing the abnormal secretion of the acid stomach digestive elements. In the imperfect child the tendency to acidity is developed easily and early. Exposure and neglect, like lying alone and a long time, etc., tends to generate acidity. Excessive scrubbing has the same tendency. Activity of the child has the tendency to lessen the alkaline secretions. In older children activity, animal food, sweets, foul air, and overstudy are the chief causes in the development of acidity. To this might be added irritation of the growing child. Climate has also a decided influence.

The excessively *alkaline* child is developed under other circumstances. This tendency is also both congenital and acquired. The mothers of these children are usually in fair flesh, great eaters and drinkers, and of a sluggish disposition. Large mothers have,

as a rule, large children, unless they get abnormally fleshy during gestation, when they rob the child of its proper nourishment. Locality and season have much to do with the development of the child; new countries, moist localities and damp seasons seem to favor excessive infantile development.

The food of the mother that favors excessive infant development is liquid, nitrogenous in character, combined with carbonaceous food that is not readily changed into saccharine matter.

After birth the excessively alkaline child may be so developed by certain food and management. The great appetite of the mother is also apparent in the child. Children that are carried on the arm along the spine are great eaters. It eats large quantities of food and wants it often. It grows rapidly and looks plump. The mother and friends are pleased at the result of this feeding, and encourage it to overeat. The nursing mother often finds that she must take something to make milk. This something is not dilute milk or simple hot water, but is usually beer, that contains so much carbonic gas, gum water and lupulin that the child develops more and more gross or alkaline. Tea does not increase the flesh of children; and sometimes a starchy gruel is preferred that increases the fattening qualities of the mother's milk. When fed the child is usually given one of the dextrose foods, or condensed milk may be preferred, and even cow's milk can be taken care of by these children

with ample digestive capacity. The result is that they can take large quantities, want to be fed often and take on enormous development.

Bathing in *warm* water aids the absorption of large quantities of fluids and stimulates the appetite. These fat children like the bath and are indulged.

In older children, whose diet consists of vegetables, especially potatoes, the excessive alkaline constitution is developed.

PATHOLOGICAL PECULIARITIES.

Disease Developments and Expressions.

The study of the natural history of acid and alkaline children reveals the fact that the disease tendencies in the two classes are radically different.

In the acid child there is a deficiency of the white blood and an excess of the red, hence the skin and mucous membrane are not well protected and there is a marked tendency to dermal irritation and interstitial inflammation. The lips and tongue are red, revealing the fact that the mucous coat is very deficient. It is not at all strange that gastritis, especially of the chronic form, is frequently met in acid babies. Thrush is easily set up by slight dietetic errors or a cold.

The acid condition of the alimentary canal gives rise to frequent thin, green discharges from the bowels. These acid children suffer greatly from colic due to intestinal gases and constriction from local irritation. They cry and fret continually, especially at night, aggravated by the systemic and local atmospheric acidity. The urine flows freely and frequently, is usually of a light color, and irritates the denuded skin if not given the utmost care. The tendency of the skin is to strophulus or heat rash. Brain trouble, due to the rush of blood from crying, colic or other disorders, brings about acute and acquired hydroceph-

aloid. The system not being nourished as it should be with proper food, makes the child uneasy, restless, and this tends to force the blood to the head in excessive quantities, especially if it cries constantly, as most of them do. Brain symptoms, hydrocephalic, as we can understand, are very common in these acid children.

The chest diseases to which these acid babies are subject are spasmodic croup (and laryngismus stridulus from the cerebral pressure), diphtheritic croup and croupous (lobar) pneumonia. Pleurisy and rheumatism do not often affect these babies until older.

The leading symptoms in any severe disease in acid children are *pain*, *fever* and *restlessness*.

In the excessively alkaline children the superabundance of lymph and white blood and the active condition of the lymphatic (absorbent and reabsorbent) system tends to produce stasis of the circulatory system and exudative catarrhs are the result. The well-developed mouth glands give us drooling early. Dentition is usually tardy and the teething complications may be numerous. The excessive flow of saliva may cause an obscure lienteria.* The form of the mouth diseases will be aphthæ—the ulcerous or gangrenous variety.

The stomach diseases met in the excessively alkaline, fleshy child are acute and chronic catarrh. This latter may be in these subjects congenital or acquired. Duodenal, as well as enteric catarrh, will be frequently

* Vide Duncan, Text-book on the Diseases of Children, p. 228.

met with. We may encounter colitis or dysentery in these children that will prove very obstinate. The most common form is gastro-enteric catarrhal inflammation, so-called cholera infantum, that may not get much attention until cerebral symptoms appear. Vesical catarrh is an annoying bladder trouble frequently met and often long lasting in the form of nocturnal enuresis.

The skin diseases are also catarrhal and very tedious, as might be inferred. The chief one met is eczema. Moisture behind the ears, chafing, crusta lactea and pustular diseases are frequently met in these fleshy children.

The chief form of brain diseases that may be met will be hydrocephalus, from overtaxed cerebral absorbents. Any serious drain, like long-lasting diarrhœa or a bronchial pneumonia, may develop cerebral anæmia from weak, flabby heart, and the child die suddenly with hydrocephalic convulsions.

Nasal catarrh, membranous croup, capillary bronchitis and bronchial pneumonia are the chief diseases of the respiratory tract in alkaline children.

The prominent symptoms of severe diseases in these excessively fleshy children are *coldness*, *pallor* and *prostration.*

THE FOOD PROBLEMS.

The Law of Diet Selection—Contraria.

This division of children into the three classes (1) normally developed, (2) those struggling with acidity, and (3) those obstructed with an excess of alkalinity makes the selection of the proper food an important and serious question.

We might formulate the rule that the lack in the given child must be supplied. In general, we attempt to supply the loss or deficiency. Even in the overfed excessively alkaline child there are serious deficiencies in nerve centres and muscular if not bony development.

The law of the diet is contraria.—The mass of the profession have followed this rule even into the realm of drug therapeutics, therefore the line where food leaves off and remedies begin is not clearly defined.

The feeding of the child to secure its proper development so as to avoid both disease extremes should, if possible, begin in ante-natal life. The wise expectant mother will consult her physician and avoid following her own whims or dietetic vagaries and the thoughtless advice of others.

To Prevent Acidity.

The expectant mother, slender and active, preferring acid articles—pickles, vinegar, lean meat, tea and

stimulants (including tobacco smoke)—should understand that she is not living to herself alone, but for the future governor, who is entitled to as perfectly a developed body and mind as circumstances allow. She should live so that, *e. g.*, her gastritis will not be inherited and develop an acid tendency in the child. She should be impressed with these dietetic rules:

RULE I. *Acids*, *spices*, *stimulants* and *activity* interfere with digestion and assimilation, besides tending to tear down what is already built up.

RULE II. *Fats*, *sweets*, *starchy food*, *water* and *quiet* aid digestion, absorption and the genesis of white blood. They nourish and fatten the body. (See How to be Plump.)

Like water, fat is a vital element. Milk contains a large amount of both water and fat. The student of histology is aware of the large amount of fat in all the normal tissues of the body. A well-nourished system is loaded with fat. If the fat of the food is deficient, the system of the mother will be torn down to supply this vital element necessary to cell development and activity. It is believed that fat as well as water is manufactured in the system.

The chief difference between the acid and the alkaline child is in the development and activity of the lymphatic system, as well as the liver. In the alkaline child they are well developed, hence we find a large amount of white blood and the tissues loaded with fat—and water. It is believed that the lymphat-

ics may be developed *de novo* under the stimulus of proper nutrition.

How to Feed an Acid Child.

One of the first things the author orders a lean child is an oil bath. This is given by the nurse rubbing into the skin oil once or twice a day. The oil preferred when it can be obtained is mutton or sweet almond oil. The latter is without odor and is to be preferred. The oil should be taken up by the skin. If any remains unabsorbed it is apt to become rancid and produce irritation. If the oil is rancid, sour (*i. e.*, the fatty acids liberated), the effect upon the skin will be manifest by redness and eruptions. From this we get a little idea of what takes place in the alimentary canal from acidity.

A warm water bath with milk in it should be given these thin acid babies once or twice a day. It is needless to say that soap that robs the skin of its fat should be used sparingly, if at all. The oil well wiped off will leave a clean skin. The oil bath may follow the water bath at night, especially if the child is restless. The rubbing, if done quietly and gently, tends to soothe and helps to secure more sleep that these acid children need so badly. The oiling and bathing gives the system a food that passes directly into the circulation and also stimulates the absorbent lymphatics. The result is a great increase of white blood corpuscles, the tissue builders.

Whether the child should be oiled once or twice a day depends upon its development, the condition of the mother and its digestive ability. The warm milk bath in the morning will soak into the tissue food so that no extra oiling may be needed. This kind of a soak may be best at night, even when the digestive organs are fairly active. If the child is premature or immature it may be oiled twice or thrice a day. If the mother is feeble and has scanty milk, neutral or acid, the child should be oiled perhaps twice a day for a time, *i. e.*, until its pabulum is ample and of good quality. If the mother is very fleshy and has been gaining in flesh during gestation we may conclude that her milk will be like cow's milk, hard to digest, and both she and the child should have much water to render it nutritious and easily digestible. Under such circumstances the child will grow and thrive better if oiled. Acid children should be given warm water to drink. If the acid child is being reared on artificial food then we must give close attention to its digestive capacity and needs. The acid digestive secretions must be lessened and their harmful effects antidoted. To outline a course of feeding for each case is necessary and often difficult. Diluted cream stands at the head of the available forms of natural food. This may be the top of the milk after standing a couple of hours. Casein stimulates the gastric secretion, and it may be necessary to remove it, giving only whey and cream. The casein, if given, must be pre-

vented from curdling into hard masses by adding sugar of milk, cooked starch, cracker water, gelatine, barley water, etc., or one of the dextrine foods. Malted milk now fills all the requirements for most of these cases. Nestle's food, Carnrick's soluble food and many others are offered for selection. Predigested food is best for these children with feeble digestive capacity. To quiet the colicky pain induced by tardy digestion free draughts of warm water may be given. This not only washes the food out of the stomach and duodenum, but relaxes the constricted intestines and thus aids its digestion, absorption and assimilation. Acid children need their food very much diluted. They are capillary feeders. Sometimes cow's milk diluted with sweetened water (2–8 parts) will agree and nourish the child. The feebler the child the more the milk should be diluted, as a rule. Milk modified as to proteids (casein), fats, water and sugar should be ordered by the attending physician.

Natural human milk has been found by one analysis to contain: *Proteid*, 1 to 2 per cent.; *fat*, 3 to 4 per cent.; *sugar*, 6 to 7 per cent.; *ash*, 1 to 2 per cent.; *water*, 87 to 88 per cent. Another analysis gave of *proteid*, 2.35 per cent.; *fat*, 2.41 per cent.; *carbohydrates*, 6.39 per cent.; *salts*, .34 per cent.; *water*, 88.51 per cent.

Milk laboratories are established in all large cities,

and for a child 3 months old a prescription may be written as follows:

℞.	Fat	3.	per cent.
	Milk sugar	7.	"
	Albuminoids	1.5	"
	Mineral water	.15	"
	Water . . . ad.	100.	"

Number of feedings, 8.
Amount, ℥iijss (3½ ounces).
Infant's weight, 13 lbs.
Alkalinity, 5 per cent.
Heat at 160 F.
Ordered for baby, ...
....., M. D.
Date, ...

A graduate has been devised that shows the proper proportions of sugar of milk, milk and water that serves as a convenient method of modifying milk when the laboratory is not convenient of access. The proportions are graded as to age of a normal child. Weight would be a better standard.

If the child passes curds, is colicky and vomits, the white of two eggs, as recommended by Prof. Cotton, may be substituted for the albuminoids.

The alkalinity is secured by lime water, but where the water used is hard, as in a limestone section, it may contain sufficient of that salt. The alkalinity may be best secured by sodium carbonate, which is appropriated both by the liver and blood. The attending physician who studies and understands the

dietetic and remedial needs of the given child can make the correct selection.

Sugar of milk should always be used to sweeten the infant's food when fed. This should be pure and free from all adulterants (secure it from a Homœopathic pharmacy or homœopathic physician, if possible). Do not use common sugar thinking it just as good. Sugar of milk aids digestion and assimilation.

The feeding apparatus must receive the closest attention. When not in use it should stand in a bowl of water rendered alkaline by a half teaspoonful of baking soda or a pinch of carbonate of soda. This is to antidote the lactic acid that is apt to lurk about the bottle even when supposed to be kept clean. The milk should never stand in the nursing bottle a moment after it is ready for use. It should be kept in flasks made for the purpose sealed with cotton so as to be germ proof.

Milk is the food of the baby and must be modified to meet the requirements of the given child. Acid children sometimes get so they cannot digest any milk then we must resort to prepared foods.

It is often necessary to get rid of some of the large amount of gastric juice secreted; hence just before the child is to be fed it may be given warm water or very thin food like cracker water or a thin gruel. This will take care of part of the gastric secretion and facilitate the digestion of the milk food that is to

follow. Any starchy food should be well cooked before being given to a child.

These acid children need to be kept quiet and should get much sleep. They are bright, the surcharged brain develops an early precocity which senseless mothers do not understand, and they are played with when the brain should be resting. Acid children are poor sleepers as a rule. A wakeful child will develop acidity. Passive exercise, quiet and gentle, like massage twice a day, being carried about, or, better yet, being driven in a carriage, will ensure sufficient exercise, fresh air and sleep at the same time. A ride on or by the side of water where the air is moist helps these children. Their acid condition tends to make them restless and nervous. Quiet motion that soothes and secures sleep should be encouraged. The important thing is that these acid children should get as soon as desirable a bank account of fat that the best development may be secured. Consult Pædohygea or the Feeding and Management of Children for further information on artificial feeding.

How to Feed the Alkaline.

The indications for feeding the excessively alkaline child are entirely different. Here we aim to lessen the amount of fluids and particularly the fat, and make more muscle, bone and brain. It is the fat and fluids that increase the adipose tissue. Their quantity must

be restricted, and here is the difficulty for these children are great eaters.

When consulted early, we should restrict the expectant mother as to her diet during the ante-natal development of the coming child. She may be encouraged to eat fruits, acid food, and to take less liquids and much exercise. Her diet should be nitrogenous food like meat, oatmeal, graham, etc. She should also be stimulated mentally. Where the mother is a great eater and lethargic in body and mind we may expect an unusually large child.

After birth the food of the alkaline child must be judicously selected. If it is nursed, the milk can be controlled through the mother. The digestive organs of both are well developed, so that the child will be able to digest strong food and maybe weaned early onto milk. In these cases it is the fatty acids that poison, they need close watching. A dose of sour milk will poison them so that the wasting in a few hours is alarming. The tendency in these children is to the gastric catarrh, as we have seen, and this is increased by fatty acids liberated in the stomach. For this reason, as they grow older, although oatmeal gruel and milk is a good diet, still if the meal is not fresh and the milk at all stale it sours on the stomach and the child is made sick. Cream food does not usually agree with these children, but corn starch well cooked and added to the milk usually agrees when they are young. Liebig's food is well adapted to the digestive

capacity of this class of children, who are essentially German in type. We now have this food prepared in various forms under the names of Horlick's, Mellin's, Lowland's, etc.

These children take early to bread and milk and like to go to the table. The salivary glands develop so early that they drool much before the teeth appear, and they should be given a crust of bread to chew on. Bread containing much nitrogen or gluten (as whole wheat or rye) is to be preferred. Potatoes they take early to and like, but nothing fattens more rapidly and it is evident that their indulgence should be held in check. These children can take undiluted milk very early, and this should be encouraged. They should also be encouraged to drink cold water in small quantities.

The feeding apparatus for these children, when artificially fed, should be one that will not allow it to be emptied rapidly. It likes to eat fast and will make a great fuss if the food does not come in great mouthfuls. The long tube with a hard nipple should be selected. It is not so necessary to keep this child quiet after it eats as it is the acid child, but that is a good physiological rule to follow under most circumstances.

The inclination of this child is to eat and sleep. It should not be fed as often as the acid child and should be made to go all night without food, but against this it will rebel, for that child likes to nurse all night or

feed often and then may be wakeful—illustrating the fact that food supplies the lack of sleep.

It will do the alkaline child no harm, but rather good, to stimulate its brain and mind by attention and its muscles by extra action. The food and water must supply the lack of bony development. It should be early taught to amuse itself and not carried too much nor wheeled about. It should lie where it can use its muscles. As it is heavy it should not be encouraged to walk early.

HYGIENIC DIRECTIONS.

Management of the Two Classes.

These two extreme classes of children will differ considerably in their hygienic management.

The Acid Child.—A child that weighs at birth less than seven pounds, or even less than eight, should be placed in the acid list and managed accordingly. It should be remembered that the skin is delicate and thin. The sensory nerves are near the surface and can be irritated by washing, by handling and by rough clothing. The skin undergoes at birth an injection of blood. This hyperæmia is necessary to change this surface from a mucous membrane to a thick epidermis. That explains the yellow color that succeeds to the hyperæmic injection. If irritated by soap a true inflammation may follow, giving rise to high fever, stupor and sometimes convulsions. The best bath is, as already indicated, an inunction with oil or lard, that has no salt in it. The oil should be *sweet.* This will help Nature to put a coat of fat under the skin and cover up the sensitive peripheral nerves.

Feeling is the first wide-awake sense in the newborn.

The subsequent baths will depend upon the age and development of the infant. If very feeble and acid, the oil baths will be best for some time. There may

be used warm water with milk in it, with a little salt added. The bath should be warm and then the child wrapped in a soft towel and not rubbed. The delicate skin may be soon irritated by friction. Handle this acid child as little as possible. If it is deficient in animal heat—have cold hands and feet—it should be held in the lap, with *the back to the nurse.* Remember that the spine of these thin acid babies lacks blood. If the spinal nerve centres are not supplied the functions of the organs in front will not be performed in a proper manner and the child will soon struggle with colic and defective aeration of blood.

The first clothing should be soft and easily taken off and on. In a case of triplets born at the eighth month they were wrapped in cotton and kept near the fire for weeks, or held in the capacious lap of willing old ladies. All of the baby's clothes should tie and cross in front. The old style of long bands and many garments should be superseded by a flannel night dress and diaper—after the navel heals. The child should be put in bed or crib with plenty beneath so as to keep it warm, and plenty above for the same purpose. The face should be more or less exposed, depending upon the weather. Fresh air breathed aids in warming the body.

The less these acid babies and children are dandled and handled the better. They will be restless enough when awake. The chief trouble is to get them to sleep sufficiently the 22–23 hours out of 24. They

are usually hard to manage for the first three months. They must be trained to be regular. This training should be begun before birth. The mother should not encourage wakefulness in herself nor children. The warm bath in the morning usually makes them drowsy, unless the mother or nurse foolishly excites them by rough or reckless handling. It may be better to feed this child before nursing. If possible, wrap it in a blanket and put it to bed to sleep for two hours after the bath, and then it can be dressed and fed and ready for another nap. It should be fed regularly, once in two, not more than once in three hours, and made to go all night without food, except perhaps once. Nervous acid children can not, should not, have to assimilate large quantities of food at a time, but should not be fed too often nor too much at once. The stomach becomes dilated and that leads to permanent acidity. A dandled, frightened child opens its mouth like a young robin. The nurse or mother is supposed to furnish the brains and control the situation for the best interests of the child. The habits and care for the first three months decide the child for rapid or tardy development. The idea should be to make it alkaline. If at birth it weighs 8 pounds the gain should be about ½ pound a week, in 6 months to 16–20 pounds, in one year to 24–30 pounds, in 18 months to 28–36 pounds, in 2 years to 32 pounds minimum, 3 years to 36½ pounds, 4 years to 41 pounds, 5 years to 45 pounds, 6 years to 49 pounds.

If it is of a nervous temperament it will be difficult to keep up to these figures.

Alkaline. The child that weighs above 9 pounds may be looked upon as alkaline, and will grow more and more gross if treated as indicated for the underling whose tendency is towards acidity. The first bath may be oil for this fleshy child. The skin is thicker and the nerves are covered with fat, so that handling does not irritate this child as it does the thin baby. It is a different piece of crockery. The water may be cooler and it can stand friction. This alkaline child tends to be stupid and sleepy. The mother should understand this. They are great eaters, and the more fleshy they become the more warmth they crave. They will want to be on the arm and nurse all night and be carried on the arm all day. The warmth of the arm to the spine stimulates digestion inordinately. It grows heavier as it approaches its ninth month, but shows no signs of wanting to walk. It is so heavy that all are afraid it will become "bow-legged"; and it will if not properly managed. Fortunately it wants to eat so that it can be weaned early. Now and before it should be put on the floor on a quilt so that it can learn to use its muscles, roll and creep. It may now be given a cool bath; but this child should not be "soaked" every day (or twice a day as may be done with the thin acid baby with advantage); twice or thrice a week may be sufficient, except soiled parts as face, hands, legs, etc. Cold water can be

given both babies, but the fleshy child can take it cold. This will be good for the gastric catarrh that these fleshy babies suffer with.

The clothing should be comfortable. Remember that the infant's stomach varies by two or three inches before and after meals, so that the clothing should be loose at all times. This child can go out earlier and be benefited thereby even in the coldest of weather. The acid baby is a delicate plant that cannot bear such exposure. *Remember acid and cold are the infant destroyers.*

This child, tending to grow more and more gross, can be exercised severely and freely. A frolic usually tires it so that it sleeps longer. Massage may be given it twice a day to develop the muscles, especially of the back, and to make it straight and strong. The child may be placed across the knees of the nurse and its back rubbed vigorously. If it kicks and squirms the muscles of the whole body will be strengthened and the fat lessened. This child should be taught early to go three hours between the times of feeding and to sleep all night with only a drink of water at about midnight. These alkaline babies and children are "so good" that the nurses and mothers are apt to indulge them to their future detriment.

GENERAL THERAPEUTIC INDICATIONS.

Acid and Alkaline Remedies.

We have seen that the indications for food are according to contraria, but, judging from the experience of years, the selection of the curative remedy is according to similia. Nothing that has come to the notice of the author has so strongly confirmed the truth of Homœopathy as the practical test of remedies selected on this acid and alkaline basis. It is not intended that this classification will in any way supersede the symptomatic selection according to the law, but may aid in showing that there is a physiological or pathological basis for the law of cure. It may also point the way for a more rapid individualization of the remedy from this objective outline. In general we might lay down the rule that:

(1) *Acid children are cured by acid remedies.*

(2) *Alkaline remedies are indicated and curative for the excessively alkaline children.*

In this connection on the general action of acids and alkalies on the digestive organs and blood, we quote from Prof. White, of Guy's Hospital, whose views serve to confirm the position taken. He says:

"*All acids* have a peculiar taste, and give rise to a feeling of roughness of the teeth. As the saliva is alkaline, they *increase the amount secreted*, conse-

quently by keeping the mouth moist they allay thirst."

It is believed that if given during a meal, acids will *check the flow of gastric juice*, as that is an acid secretion. When the amount of acid secreted by the gastric mucous membrane is deficient, acids taken, after a meal, when all that the stomach can secrete has been secreted, aid digestion.

Acids quickly become converted into neutral salts, and are probably absorbed as such. Some, especially diluted *sulphuric*, preserve in the intestines their *astringent action.* Acids *increase the amount of bile* poured into the intestine.

"*Acids* may render the blood *less alkaline*, but never acid. They do this by combining with some of the alkali of the plasma. Phosphoric acid is believed to increase the amount of phosphates in the red blood corpuscles. It is probable that all of the acids check the formation in the liver of men, and (except citric, acetic, tartaric and lactic) are excreted as ammoniacal salts. Acetic, citric and tartaric acids are decomposed in the blood, alkaline carbonates being formed, and the alkalinity of the urine is increased. Lactic acid is either converted into a carbonate (alkaline) or passed out as carbon dioxide in solution in the urine." (Mat. Med. and Therap., p. 251.)

"As *alkalies check alkaline secretions*, they momentarily check the secretion of saliva. Because alkalies stimulate acid secretions, the flow of gastric juice is *excited* if alkalies are given before a meal, but if at the

end of or after a meal the gastric juice already secreted is *neutralized.* Being readily diffusable, alkalies are quickly absorbed. The blood is rendered more alkaline. Probably all alkalies circulate in the blood as carbonates, but their action as alkalizers of the blood is very transitory, for they are quickly excreted. The amount of hæmoglobin, if it is deficient, is said to be increased." [White's Materia Medica and Therapeutics, p. 117.]

From a study of the action of these two classes of remedies in diseases we can summarize their general action, being guided by similia, as follows:

In brain diseases the special classification of the remedies on the acid and alkaline basis would be about as follows:

Alkaline children with inflammation of the brain, effusion and coma would suggest such remedies as *Gelsemium*, *Belladonna*, *Veratrum viride*, *Arnica*, *Opium*, *Apis.*

Acid children, who are nervous, restless and anæmic, would suggest *Aconite*, *Arsenicum*, *Rhus toxicodendron*, *Sulphur.*

In throat and chest diseases the remedies indicated would be:—

For the alkaline children, *Kali*, *Hepar sulphuris*, *Belladonna*, *Tartar emeticus.*

For the acid children the remedies might be

Aconite, *Spongia*, *Iodine*, *Bryonia*, *Phosphorus*, *Sulphur*.

In bowel diseases in both diarrhœa and constipation the indicated remedies would be:—

For alkaline children select from *Nux vomica*, *Mercurius*, *Kali*, *Calcarea*, *Chamomilla*, *Dulcamara*, *Alumina*.

For acid children the selection would be from among such remedies as *Arsenicum*, *Podophyllum*, *Pulsatilla*, *Rhus*.

In diseases of the skin the moist eruptions or pustules of the alkaline children need such alkaline remedies as *Calcarea*, *Baryta*, *Mercurius*, *Dulcamara*. I would place in this list *Graphites*, although Hering places it in the acid list.

For the acid children with their dry, scaly, chafed skin such remedies might be called for as *Sulphur*, *Arsenicum*, *Silicea*, *Rhus*.

When the child bias is not extreme and such remedies as *Hepar sulphuris*, *Calcarea iodium*, *Mercurius iodatus*, *Calcarea phosphorus*, etc., are indicated by the symptoms we would expect, as we doubtless get, a more marked action of the element in the remedy that corresponds to the constitution of the child. For example, the action of *Sulphur*, *Iodine* and *Phosphorus* would be more marked in the acid than in the alkaline one. We see here a possible explanation why *Baryta carb.* is such an efficient one in the chronic enlarged glands in excessively fleshy subjects.

The special indications for the various remedies will enable us to trace out the subdivision of the classification very much farther. A wide and practical field is open before us, and the author hopes that there will be many volunteers. It would be interesting and valuable if we could classify the whole materia medica on this therapeutic basis, but that would require more time than it has yet received. It is very gratifying that so able a man as Father Hering made such a valuable beginning.

HERING'S CLASSIFICATION OF DRUGS, CHEMICAL AND ELECTRICAL.

"I desire to communicate to the practitioners of our school a rule which I have followed with more and more confidence for the last ten years, and which I wish to have more extensively and fully tried.

[I acknowledge, as "practitioners of our school," such only as are accustomed to observe the general practical rules laid down in the Organon, *i. e.*, those which require the most careful inquiry into the symptoms of each case as a case by itself; the writing down of all the symptoms; the selecting of one remedy according to the characteristic similarity, and the administering of that one in the smallest doses and at the longest intervals the case allows.]

"The rule I propose to give may not answer for cases in which this course is not pursued, or only in some instances. I do not know, but in those cases in which I have preferred the lowest preparations, frequently repeated, I have found it of the same utility as in others.

"It is further to be remarked that this rule is only a subordinate one, the main rules never being altered by it, and that it is thus subject to apparent exceptions and modifications."

Rule. Morning aggravation of a looseness of the

bowels indicates the acids or electro-negative drugs. Evening aggravation of the same (diarrhœa) indicates the *alkalies* or electro-positive drugs; with *coughs* the reverse is the case. An aggravation in the *morning* indicates the *alkalies.* If in the evening the *acids.*

The looseness of the bowels, as well as cough, should be what is called 'active.' If they form a very subordinate group among the symptoms, the rule cannot be applied with the same certainty.

By "morning" I understand the hours from midnight until noon; by "evening" the hours from noon till midnight.

For the purpose of bringing into view all our medicines which belong to these two classes, I add a table containing all hitherto proved, including also some which have not yet been published, though proved by myself and friends.

Electro-Negative.	*Electro-Positive.*
Oxygen,	Hydrogen,
Nitric acid,	Ammonium,
Chlorine,	Causticum,
Muriatic acid,	Kali carbonicum,
Bromine,	Natrum carbonicum,
Iodine,	Lithium carbonicum,
Fluoric acid,	Baryta,
—Sulphur,	Strontiana,
Sulphuric acid,	Calcarea.
—Selenium,	Magnesia carbonicum,
Phosphorus,	Alumina,
Phosphoric acid,	Zincum,
Arsenicum,	Cadmium,

Electro-Negative.	*Electro-Positive.*
Antimonium crudum,	Stannum,
Silicea,	—Ferrum,
—Carbons,	—Niccolum,
Graphites,	—Manganum,
Oxalic acid,	Cuprum,
Citric acid,	Mercurius,
Lactic acid,	Argentum,
Benzoic acid,	Plumbum,
—Tellurium,	Aurum,
—Osmium.	Platina,
	Palladium,
	—Petroleum, etc.

Those substances which are preceded by the sign (—) are such as may act in an opposite way. All such as readily form gaseous compounds with hydrogen may act like the alkalies. I observed this long ago with *Sulphur*, and a few weeks ago with *Tellurium;* it may be the same with *Selenium*, *Arsenicum metallicum*, *Bismuthum metallicum*, and *Antimonium metallicum.*

The combinations of *Hydrogen* with *Chlorine*, *Bromine*, *Iodine*, and *Fluorine* act electro-negatively.

The alkalies we have proved as carbonates, and it would be of very little use to prove them in their caustic state, as either another combination is formed with vehicles or they unite with carbonic acid while on the tongue or on their way down to the stomach. That they become free from chemical affinities in the potentized state has not yet been sufficiently proved to be adopted as a rule.

The heavier metals are only mentioned provision-

ally, as we shall consider them separately hereafter; and the iron group seems to incline to the other side. In fact, here, as well as everywhere else in nature, there are links between the extremes.

Plants and animals used as drugs always present combinations of alkalies or acids, and the application of the rule must be modified or restricted according to the prevalence of positive or negative action.

In the course of my lectures on Materia Medica in Allentown, I stated to the students that such of our drugs as belonged to the same family—as, for instance, the *Solanaceæ*—were connected by a rule of relationship, in regard to their potarity of action, *Capsicum* being the electro-negative extreme and *Tabacum* the positive, the others standing in a regular order between. Among the Ranunculaceæ the positive end is occupied by *Helleborus*, the negative by *Staphysagria*. This I find holds good in every family of plants and in every family of chemical substances; and we may from this conclude that the different plants also may be arranged in two classes according to their respective chemical constituents. There seems to be a correspondence between such families as are remarkable for containing acrid substances, as the Ranunculaceæ and Euphorbiaceæ, and the electro-negative chemicals, and between such families as contain bitter and narcotic substances and the electro-positive chemicals. In accordance with this remark I subjoin a small table of plants, as far as I think the rule holds good:

Electro-Negative.	*Electro-Positive.*
Aconitum,	Nux vomica,
Pulsatilla,	Ignatia,
Staphysagria,	Belladonna,
Podophyllum,	Dulcamara,
Mezereum,	Lycopodium,
Cepa,	Rhododendron,
Jatropha,	Senega,
Thuja,	China,
Rhus.	Sanguinaria.

Whenever the symptoms indicate a medicine belonging to the opposite side the diarrhœa or cough may also subside, but in most cases it is subsequently aggravated.

Practitioners using this rule will find that it gives especial aid in excluding medicines belonging to the other side, in all cases in which the time of day is very marked, but the other symptoms not sufficient to indicate a remedy with precision. Of course the selection of the drug within the indicated class must be rightly made or the rule cannot be expected to be found correct.

In a subsequent communication I shall endeavor to show the theoretical importance of these considerations, especially for the transformation of our empirical Materia Medica into a natural science, and shall afterwards point out other characteristics of both classes. [North American Journal of Homœopathy, Vol. I, 1851.]

The author sincerely hopes that this classification which has been attempted to be elaborated on a

scientific basis will not lead to careless guess work in diagnosis nor hasty generalization as to diet and treatment, but rather will enable the physician to view these subjects in their true light. It may enable him to "see right through a child" and to understand "the why"—the disease tendency, the food needed and the remedies indicated, and to unite with the author in exclaiming "Homœopathy excelsior." To revolutionize children and bring them to the normal or healthy standard is as great, glorious and necessary reform as anything that can engage a lover of humanity. It is a great satisfaction to know that much may be done by proper management and carefully selected remedies. Let us do what we can to improve the race.

SPECIAL REMEDY INDICATIONS.

Leading Acid and Alkaline Remedies.

For children the selection of the remedy is made from the objective symptoms chiefly and these are here emphasized.

Aconite will be indicated in acid children who are feverish, restless and frightened; clings to the nurse and wants to be held and then does not lie quiet, but tosses about.

The *Arsenicum* child is also restless and wants to change its position, but is not feverish but rather cold; kicks off the covers and has the peculiar thirst for small quantities of water often, which may be vomited or passed as thin, watery stools. The emaciation of the *Arsenicum* child is extreme and rapid.

Antimonium crudum. The *Sulphide of Antimony* is classed by Hering as an acid drug, but it has a "thick, milky-white coating on the tongue." "Sore, cracked and crusty nostrils and corners of the mouth" indicating digestive disturbance. "The child cannot bear to be looked at or touched." This is the spirit of the alkaline child that has become run down in constitution—the hydrogenoid, alkaline.

The *Bryonia* child is active, nervous, restless in sleep, talks about play. "In hydrocephalus throws

left leg about." The thirst is for large quantities of water. Child usually quiet when sick.

The *Benzoic acid* child wets the bed. The urine has a strong urinous odor and stains the diaper a dark brown.

The *Capsicum* child is described as "light, with blue eyes, nervous, but stout and plethoric." That would place it in the alkaline class. "Children dread open air, always chilly, refractory, clumsy, fat, dirty and disinclined to activity (work or thinking, study). "Inclined to be jovial, but gets angry at trifles."

The *Cepa* child suffers with "acute catarrhal inflammation of eyes, nose and mucous membranes," especially in the spring of the year. "The discharge *corrodes nose* and upper lip" like any other acrid (acid) discharge from acute coryza.

The *Bromine* child has "light blue eyes, flaxen hair, light eyebrows, fair, delicate skin, blonde, red-cheeked." Scrofulous girls, nervo-sanguine. Has croupy symptoms, with hoarseness, with whooping cough. Swelling of glands, stony, hard; lymphatic glands obstructed.

Graphites belongs to the alkaline (or neutral group of Hering). "Eruptions behind the ears, which ooze an albuminous, sticky fluid." "Children impudent, teasing, laugh at reprimand." "Lymphatic œdema, blonde hair, pale face, low spirits."

The *Iodine* child has dark or black eyes and hair—a brunette, bilious temperament. "Has ravenous

hunger; eats often and much, but loses flesh all the time from diarrhœa." In marasmus the child has a brownish face and copious, papescent stools; seems better after eating. Overgrown boys with weak chest. Low, cachectic condition, with profound debility and great emaciation.

The *Lactic acid* child is intensely acid. Smells sour as a swill barrel. Vomits food after partially digested. Diarrhœa thin, watery, acrid, excoriating, later intensely green. Soft cranial bones and great emaciation. Large doses *disagree* with melancholic, choleric constitutions. Dark hair and eyes, anæmic (nursing) women.

The *Mezereum* child is light haired, irresolute, of phlegmatic temperament, decidedly alkaline. Eczema of head and face, with thick, leather-like crusts with pus beneath. Child scratches face until it is covered with blood. As Grauvogl notes, this constitution is made worse by cold air (winter), cold washing, and at night.

The *Muriatic acid* child has dark hair, dark eyes, dark complexion. Is acid, irritable, peevish, restless, disposed to anger from acidity. Fever rapidly takes on severe typhoid type; moaning, *sliding down in bed* (when not due to brain disease).

The *Nitric acid* child is acid, decidedly thin and dark complexion, nervous. The urine smells like horse's urine (hippuric). When sick it runs down

rapidly; has sore, cracked lips. Diarrhœa, cries after stool, which excoriates.

The *Podophyllum* child is a small, nervous, bilious, dark-skinned acid child subject to bilious spells, with yellow meal-like stools that are attended with prolapsus ani. Teethes with difficulty and subject then to attacks of diarrhœa; stools looking like dirty water, and worse in the early morning. The poisonous principle is the irritating podophyllic acid—a coloring principle.

The *Phosphorus* child is acid, tall and slender (nervo-sanguine), with a feebly developed lymphatic system. It has bright pearly eyes, fair skin, blonde, soft or red hair, delicate eyelashes, precocious and restless. The active brain robs the nutritive system, and hydrocephaloid, or, later, tuberculosis, cuts short a promising career.

The *Phosphoric acid* child is more intensely acid. Grows rapidly tall. Oblivious to a profuse, white or watery diarrhœa. The urine is profuse, clear, watery or even milky from phosphates. Select for such a child a stupid nurse, whose very stupidity will smooth (hypnotize) and feed. Growing pains.

The *Pulsatilla* * child may be described as sandy hair, blue eyes, pale face, mild, quiet, yielding disposition, phlegmatic, easily offended, cries easily, due, doubtless, to the malnutrition which changes an alkaline child into an acid one. This may account for

* The acid principle is *Anemonin* $C_{10}H_8O_4$.

the mixed character of the shifting *Pulsatilla* symptoms.

Rhus. As the active principle of this drug is a volatile acid it will be indicated according to the law of similars among the slightly acid children. Complaints from being caught in the wet while overheated. Rheumatic, but keeps on the go. Restless at night. Like the oxygenoid constitution the *Rhus* cases are worse before a storm, but also like the hydrogenoid they are worse from cold, wet, rainy weather. They may be in one class or another, depending upon their health.

The *Silicea* child is sandy, sanguine, nervous and irritably acid. They have fine dry skin, lacking in fat. The face is, of course, pale and fair. It is a weakling with little muscular development, but still active. Has a defective reabsorbent system, hence much transpiration, especially on its active head, and profuse suppurations. Large head, open fontanelles. Large abdomen. The child develops with difficulty, and its symptoms are easily understood.

Staphisagria. The white crystalline, poisonous alkaloid that somewhat resembles *Aconite* in its action will explain why this is placed in the acid class. It is a parasiticide and a remedy of vigor. Child ill-humored, cries for things and then pushes them away (like *Kreosote*). The glandular system is inactive, hence flatulence and styes; notwithstanding it seems

always hungry, becomes emaciated and pot-bellied. Teeth turn black and crumble.

Sulphuric acid. Child light-haired, lacking bile. Smells sour in spite of careful washing (*Rheum*). The acidity produces weakness and exhaustion soon stops the child's career unless arrested.

Thuja. This remedy is classed by Grauvogl as a remedy for the hydrogenoid constitution. It seems that it properly belongs in the alkaline or neutral group, as warts may be found in both. "It acts very well in lymphatic temperament, in very fleshy, dark complexion, black hair and unhealthy skin." *Sweats only on uncovered parts.* Diarrhœa of bright yellow, watery stools expelled with noisy flatus, gurgling as water from a bunghole; worse in the morning. Warts in crops. Nævus. Light hair, lax muscles.

Alumina, it is said, is indicated in "spare, dry, thin subjects of dark complexion." Cholera infantum, stools green, acidity of primæ viæ. That would class it among the acid remedies as well as the idea that it is "the aconite of chronic diseases." But then other symptoms, as morning cough, would class it otherwise, as has Hering.

Ammonium carb. is an alkaline lymphatic remedy. Stoppage of nose, mostly at night, long-lasting, coryza or snuffles. Morning cough (3 to 4 A. M.).

Argentum is said to be indicated for "tall, thin people of irritable temperament." Would place it on the acid list. This corresponds to the

Argentum nitricum child, which "looks like a withered old man." Guernsey says: "We think of this remedy on seeing a withered and dried up person made so by disease." It belongs in the acid list, as might be inferred also from "red, painful tip of the tongue," "stools like chopped spinach." Irresistible desire for sugar, etc. In low doses it corresponds to the *Carbo nitrogenoid* (like *Sulphur* and *Cuprum*). In the higher it corresponds to the hydrogenoid constitution (Grauvogl).

Aurum with its aggravation from cold air, getting cold and in winter, places it among the alkaline remedies, but not remarkably so. (*Carbo nitrogenoid* —normal alkaline.)

Baryta carbonica belongs in the alkaline list. It is indicated for dwarfish children who do not grow, and finally become emaciated from obstructed lymphatics. Always cold and chilly. Enlarged glands (tonsils swollen and suppurate), face puffy, abdomen distended.

Belladonna. Adapted to bilious, lymphatic, plethoric children who are lively but always taken suddenly and violently sick, often with delirium. Red face and eyes, starting in sleep. *Belladonna* is said to be "the acute of *Calcarea*" and is alkaline.

Calcarea carbonica is a typical alkaline remedy. Children large and flabby, leuco-phlegmatic. Large open fontanelles and much perspiration about the head, which wets the pillow far around when the child

sleeps. Child self-willed and inclined to grow fat. Very sensitive to the least cold air.

Causticum, if we judge by its symptoms, belongs in the alkaline class. It is valuable in catarrhal diseases of respiratory or urinary organs.

China or *Cinchona* is a remedy for stout, swarthy persons, sensitive to cold draughts of air. Its action is upon the alkaline liver and spleen, which determines its rank.

Cuprum is placed, we see, in the alkaline list by Hering, and is a remedy for the carbo nitrogenous constitution by Grauvogl. It is, perhaps, more alkaline unless the patient is suddenly rendered acid as in cholera. Cramps in calves of legs at night are met in hyperæmic spines of fleshy alkaline people.

Dulcamara is indicated for "complaints caused or aggravated by change of weather from warm to cold" in phlegmatic children, and this would keep it in the alkaline list. It is comparable with *Baryta carb.*, *Natrum sulph.* and *Thuja.*

Hellebore. The fact that it is comparable with *Belladonna*, *Apis* and *Podophyllum* in brain symptoms during dentition and valuable in post-scarlatinal dropsy, renal hydrocephalus, would class this drug in the alkaline list. (Hydrogenoid also.)

Ignatia. The child has "dark hair and skin, but mild disposition." Bilious, with a well development of the sympathetic nervous system. Cries and laughs easily; *sobs*, and cannot stop, from injury or fright,

especially if punished. Twitchings from fright or grief. Worse from cold air would keep it in the alkaline class. Stands in the same relation to children (and women), sanguine, that *Nux* does to nervo-bilious men. "More *Ignatia* than *Nux* persons in North America." Hering.

Kali carbonicum, with its morning cough (4 A. M.) and puffiness of upper eyelids in obese children, settles it in the alkaline list. This also explains the myalgia that similates pleurisy in the hyperæmic, fleshy bodies. Dark hair.

Kali phosphoricum. Pale, sensitive, irritable persons. The *Phosphorus* governs here. (See *Phos.*)

Lithium carbonicum. From the one symptom, "milk crust," the inference may be drawn that it belongs in the alkaline class.

Lycopodium is a vegetable sulphur and a remedy "for persons intellectually keen but physically weak; upper part of body emaciated, lower part semi-dropsical." That would indicate that the body had been fleshy, but through indigestion has been run down, so this drug may be placed in both classes, or in a third class, where Grauvogl has placed it. For weak children with well-developed heads, but puny, sickly bodies. After sleep cross, pushes everything away.

Magnesia carbonica. Magnesia is one of the alkaline earths, and this remedy is "frequently indicated in children" "of irritable, nervous temperament, lax fibre, who smell sour." The tri-weekly attacks of

diarrhœa point to the liver, and the stools, "like scum of frogs' pond," tell of the sudden flow of bile. Such an irregular system cannot develop properly. The *muriate* and *phosphate* puts it towards the acid class indicated in adult diseases chiefly. The comparison is interesting. *M. mur.* Puny, rachitic children, especially during dentition. *M. phos.* Teething disorders in strong children.

Mercurius is a bilious remedy and therefore alkaline. It is said to be "best adapted to light-haired persons (children); skin and muscles lax." This is another periodical (moon) remedy. The broad, flabby, whitish-yellow coated tongue, showing prints of teeth, tells of gastric catarrh and sluggish, irregular absorption.

Natrum sulphuricum. Hydrogenoid condition, feels every change from dry to wet. Feels best on dry day.

Natrum carbonicum. Sodium carbonate is also an alkaline remedy. "Child dislikes to exercise, physical or mental," because they exhaust. "Aversion to open air," because takes cold. Alkaline children are lazy and weak. "It follows *Sepia* well"—another bilious, alkaline remedy.

Nux vomica is a purely bilious remedy. Child has dark hair and eyes. Nervo-bilious temperament, wakes early, is active and quarrelsome. Feels best in damp, wet weather and out of doors. Child wants to be out of doors.

Ailanthus. Bilious temperament, stout and robust,

alkaline. Malignant scarlet fever, bluish tint; injected eyes, excoriated nose, dry tongue, stupor.

Palladium. This metal, belonging to the *Platina* group, is a bilious remedy with chalky stools from duodenal catarrh. It is a rheumatic, lazy drug.

Plumbum has "aphthæ and dirty looking ulcers and purple blotches in the mouth and on the tip of the tongue." "The sallow, pale, corpse-like complexion" tells that the system is torn with a storm interfering with nutrition, manifest by violent colic. Pressure or squeezing the child's abdomen relieves. Spinal irritation is back of it all.

Rhododendron. This is a gouty, rheumati cremedy, worse in cold, damp weather, as are alkaline and hydrogenoid constitutions, and especially before a storm; when the storm comes they are relieved. Alkaline subjects are very timid; cannot bear to be alone, especially in the dark.

Sanguinaria. This plant grows in rich alkaline earth and should belong where Hering has placed it. It is curative for sick headache that is sometimes met with in nervo-bilious children and recurs every seventh day.

Stannum is another colicky remedy; carrying the child so that the shoulder presses the abdomen relieves. Growing children sometimes manifest "great weakness of chest, so weak cannot talk." Many of the symptoms would seem to place this drug close on to the border of the acid list.

Strontium has an evening cough and undoubtedly belongs to the alkaline class. Great weakness and emaciation is produced by *Strontium carb.* It should be thought of when the fleshy child runs down rapidly from diarrhœa or profuse urination, or both.

Tabacum. Many children of to-day are smothered in tobacco smoke, so that it is important to know whether it does more than prevent oxidation of the blood. It is said that the smoke contains little nicotine, "but small amounts of Hydrocyanic and Acetic acids, Creosote, Sulphur and Carbon compounds" ("White's Mat. Med. and Ther.," p. 382), which tends to paralyze the lungs. Tobacco acts like an acid.

Osmium is an old element that rapidly oxidizes, forming *Osmic acid*, "though its acid properties are very weak" (Remsen). Hering puts it in a list that may act in an opposite way. "Long-lasting hoarseness" and "paroxysms of convulsive coughing" would suggest this remedy.

Selenium is an element and is said to "be adapted to light complexion (blondes)," and where there is "great emaciation of the face, hands, legs and feet," due to lack of appetite, sleep and dribbling of urine. It acts like an acid.

Sulphur is one of the most active agents of cell change; united with oxygen it becomes one of the most powerful acids. This drug is adapted to "persons of nervous temperament, quick motioned, quick

tempered, *plethoric*, skin excessively sensitive to atmospheric changes." "Child looks old, cannot bear to be washed (friction irritates), emaciated, big-bellied, restless, hot, kicks off the clothes at night." Frowzy hair, has worms. The fact is that the child once in normal health, through restless sleep and poor appetite, especially in hot weather, rapidly emaciates. *Sulphur* may prove the similar curative remedy.

Tellurium is an element found with gold that crystallizes easily. It acts like an alkaline drug, producing and curing "fluent coryza with hoarseness," increased urination, ringworms, otorrhœa of long standing. It has a quieting effect upon the mind.

Ferrum acts like an alkali. "Diarrhœa worse mornings." It has pale mucous membrane—lips and mouth—but that is not due to fat in the tissues, but the absence of red blood due to the obstructed condition of the spleen. It belongs to the sanguine temperament, who have a big heart that keeps the little blood well to the face on excitement.

Manganum. No wonder that Hering was in doubt about this drug. It seems that the symptoms were developed by the carbonate (alkaline) and the acetates. The mental irritability would suggest the action of an acid, while the morning cough would place it in the alkaline list. It is worse in cold, rainy weather and from cold things, and Grauvogl would place it in the hydrogenoid group.

Niccolum. Nickel is a metal element that may act

both as an alkaline or acid drug depending upon the combination. These symptoms were produced with the carbonate and some are significant: "Weak, burning eyes in the evening;" "sour, offensive water exudes from the teeth;" "violent hiccough for several evenings." Our 5 cent pieces contain 25 per cent. nickel and 75 per cent. copper. The physician should carefully inquire; are not these symptoms pathogenic.

Petroleum. The moist eruption; eczema of fingers and toes and hands, worse in winter, would class it chiefly as alkaline and hydrogenoid. It produces gastric catarrh; relieved by eating. It is said to be adapted to persons with light hair and fair skin, but of irritable, quarrelsome disposition; want their own way and are easily offended.

Oxalicum acidum has a very sensitive stomach, cannot bear to be pressed upon; colic caused or aggravated by sugar. Motion increases pains. Skin mottled in circular patches. Marbled skin. Warts.

Jatropha curcas. This Cuban physic that produces symptoms that correspond to cholera may prove of value in recovery from an attack of cholera infantum where the stool comes out like a shot: "Stool watery and in gushes." Itching of nose while eating. Pale face with blue margins around the eyes. Acid.

Cadmium. This metal is found with zinc, which some of its symptoms resemble. The provings were made with the *Sulphide.* Sleeps with eyes open. While asleep the feet are agitated by shocks. [See

Nux v. and *Tabacum.*] Yellow spots on the cheeks and nose. Swelling of the lips [also *Lachesis*].

Chlorine. Sudden and extreme dyspnœa from spasm of the vocal cords. Crowing inspiration, but expiration almost impossible. These two symptoms tell of the severe trouble this remedy should relieve. Hering has given it the proper classification.

Citric acid. Scrobutic condition of gums from malnutrition.

Gelsemium. Child well developed but nervous. Becomes more so, especially in hot weather. Bad effects from fright; fever (stupid), and diarrhœa. Fear of falling, grasps the crib or nurse. Worse in damp weather. Alkaline subjects.

Apis. Excessively alkaline. Glands enlarged and indurated. Children and girls, generally careful, let things fall. Lack of brain development and tendency to effusion (cerebral), ulceration of navel. Follows after *Sulphur* in hydrocephalus.

Arnica. Bodily sensitiveness to pain or bruises. Recover slowly from mechanical injuries. Alkaline. Cries when handled. Restless, but moves slowly. Stimulants like wine aggravate the effects of *Arnica* and *Zinc.*

Tartar emeticus. Antimonium tartaricum is adapted to torpid, phlegmatic persons, the hydrogenoid constitution of Grauvogl. Excessively alkaline. Great sleepiness even when sick. Craving for apples. In capillary bronchitis mucus threatens to suffocate child;

froth works out of mouth while asleep. Child clings to nurse, wants to be carried, cries and whines if any one touches it. Fleshy children are great babies, usually good natured when well.

Platina. This regal metal resists chemical combinations, hence its action is unique. Hering makes it neutral and Grauvogl classes it as a remedy for the carbo nitrogenoid constitution on account of its power to absorb oxygen. "Painful sensitiveness of the genitalia" in a child will arrest the attention. The haughty disposition must be also present. The changeable mood and pains coming and going slowly will decide for *Platina* (see also *Stannum*). Nervo-sanguine temperament.

The *Carbones.* It is said that *Calc. phos.* is complementary to *Carbo an.* and *Kali carb.* is complementary to *Carbo veg.* Hering says the former is indicated for "young scrofulous subjects and elderly people (second childhood), especially with venous-plethora, blue cheeks, blue lips, debility." *Carbo veg.* for "children after exhausting diseases." The greater the venous stasis the stronger the indication.

Fluoricum acidum is indicated in weakly constitutions, sallow skin with emaciation. "Nævus of children on right temple." Elevated red blotches.

Actea racemosa (*Cimicifuga*) "Morning diarrhœa of teething children" classes it among the acid drugs.

Æthusa. This is a remedy for acid children who vomit their milk in great curds. Cannot take milk.

Idiocy. Spasms, eyes turned *downward.* Children during dentition.

Aceticum acidum. Vinegar produces "pale, lax, lean subjects." It is injurious to children and the aged. It is an antidote to many drugs, especially anæsthetic vapors. It follows *China* well.

Camphor, being a general antidote to vegetables, does not belong to either the acid or alkaline class. It is sensitive to cold air and may "brace up the child after drugging." In action it resembles *Arsenicum* and *Veratrum album.*

Chamomilla is said to be adapted to "persons and children with light-brown hair, nervous, excitable temperament." That seems to place it in the acid list. These children's teeth erupt with difficulty and they are cross, "too ugly to live;" quiet only when carried, which air motion soothes their irritable nerves. Stools green like chopped eggs and spinach (yellow and green), offensive like rotten eggs (sulphureted hydrogen).

Cina or *Santonin.* Santonin is said to be neutral. Adapted to children with dark hair, very cross, irritable, ill-humored, want to be carried, but carrying gives no relief. Does not want to be touched; cannot bear caresses, desires many things but rejects them like *Ant. t.*, *Bry.*, *Cham.* Canine hunger, bores in nose. Grinds teeth at night. Intestinal irritation. Worms. Malnutrition.

Coffee. This drug increases the alkalinity by slow-

ing up process of digestion. Indicated in tall, lean persons. It stimulates the brain, so that we have hasty eating and drinking; children so full of play neglect meals or eat hurriedly. Sleepless, wide awake. Very quieting to nervo-bilious, excitable children.

Cicuta has also grinding of the teeth; with it is compression of the jaws as in lockjaw. Convulsions (violent opisthotonos), especially during dentition. Falls on head; if *Arnica* does not relieve, prevents meningitis. Eats chalk, coal, etc., with relish. Child tries to become alkaline. Pustules run together, forming large sores.

Hyoscyamus is said to be especially adapted to "persons of sanguine temperament;" who are irritable, nervous, hysterical (acid); convulsions from cerebral congestion (uræmic); retention of urine; night cough persistent; light hair.

Natrum muriaticum. Chloride of sodium may act either way. Children grow thin about neck, rapidly, from summer diarrhœa; craving for salt; hang nails; headache of school girls (also *Calc. phos.*). "Salt eaters (women) seldom have male issue." *Old Book.*

Opium. Bad effects of fright, convulsions, etc.; sphincters closed; pupils contracted; venous system retarded so visions startle the child; sleep heavy; stools hard, round, black balls. Alkaline.

Mezereum. Phlegmatic temperament; light hair; irresolute; alkaline.

Baptisia. Alkaline lymphatic temperament. High fever, stupor, red tongue, foul breath.

Colocynthis. Blondes; rheumatic; subject to severe attacks of cramp, colic.

Rheum. We would expect that the root of the rhubarb plant would be alkaline. It flourishes best in rich soil. It stimulates the gastric flow so that the stools and all excretions have a sour smell. Child smells sour even after washing or bathing, like *Hepar.* Hair wet and sour whether quiet or in motion. Child irritable, dislikes favorite playthings. Cries a great deal.

Veratrum. The *viride* is indicated for full-blooded, plethoric, alkaline children. High fever (104°), stupid, cerebral congestion, starts, jerks, convulsions.

The range of the *album* for "violent vomiting with profuse diarrhœa" and collapse indicates that like *Arsenicum* and *Camphor* it stands to rescue the severely poisoned (acid) body; anæmic, lean children.

Zincum. This drug is worse from getting wet and cold (hydrogenoid alkaline, perhaps). It affects the brain and nerve spinal centres; that explains the nervous, "fidgety" feet. Chorea from suppressed eruptions (or fright). Stupor from undeveloped exanthemata. *Zinc* will stimulate the weak and flagging powers.

Hepar sulphuris calcis. Indicated for "torpid, lymphatic constitution." Persons, children with light

hair and complexion, slow to act (reverse, *Silicea*). Muscles soft and flabby.

Ipecac. Emphysematous individuals. Children (and women) constant nausea. Difficult breathing, wheezing from least exercise. Stools grass green, acid.

Iris versicolor. "Scrawny, scrofulous children for weeks after birth." Impetigo (acid).

Cocculus. With sluggish disposition. Light hair. Alkaline.

Kali bichromicum. Alkaline, fat, chubby, short neck children, disposed to croupous inflammations, membranous. "Fat, light haired persons who suffer with catarrhal, syphilitic and scrofulous affections." Florid complexion, blotchy red and thick skin.

Kreosotum. Dark, livid complexion. Slight, lean (acid). Disposition sad, irritable. Torpid, leucophlegmatic temperament, alkaline. Old looking children, hard to awaken. Acts both ways.

Lachesis. Better adapted to thin (acid) and emaciated than to fat persons.

Ledum palustre. Complaints of persons who always feel cold and chilly. Pale, delicate persons, mother of rheumatic or gouty diathesis.

Lobelia. Light hair, blue eyes, fair complexion, inclined to be fleshy (alkaline).

Stramonium. Young, plethoric persons (children), chorea, mania, fever.

Nux moschata suits children (and mothers) with a

cool, dry skin, soft, straight hair, who do not perspire.

Psorinum. Pale, sickly, delicate children. Peevish, unhealthy-looking children, who have a disagreeable odor about them. Face pale, yellow, sickly; broad blue rings around eyes; bluish appearance; burning heat and redness; swollen with eruption; offensive smell. Sycotic. Acid. Compare *Sulphur.*

Sepia. Dark hair and eyes, rigid fibre, inclined to be plump (alkaline). Mild, easy disposition. Take cold easily.

Spigelia. Light hair, debilitated, pale, thin, bloated, weak, exhausted from handling. Children afflicted with worms, lumbrici chiefly.

Spongia. Light hair, lax fibre, fair complexion. (See *Iodine.*)

GRAUVOGL'S CONSTITUTIONS.

The Hydrogenoid and Oxygenoid.

[It will be noted that while the *cause* may be found in the digestive organs, Grauvogl draws graphic pictures of the bodily conditions resulting therefrom. These studies are complementary, it would seem.]

Hydrogenoid. I always recognize this constitution of the body (distinguished by too great a proportion of water, or by hygroscopic blood) by the circumstances accompanying any disease, and for these I always inquire as soon as the patient has told his complaints:

If he feels worse in cold and damp weather and in rain, then I know I have to choose among the remedies similar to his disease, *e. g.*, such as contain a greater percentage of O with C and H, consequently that produces more heat and thereby diminishes the influence of water.

The symptoms of disease in this hydrogenoid constitution are aggravated by everything that increases the atoms of water in the organism; by baths, for example, whether they are mineral baths or simple water baths, or whatever increases the attraction of the organic molecules for water, as, for example, the eating of fish, etc.

All diseases in this constitution are increased by cold, also by cold and cooling food and drinks, for example, sour milk, hard eggs, even cucumbers and mushrooms, but chiefly by living near water, especially near standing water.

This knowledge is to me of inestimable worth, for I have cured simply and solely on this experience many, very many, patients who have for years been sent by other physicians from one bath to another, and where they never found any relief, but often the most marked exacerbation of their sufferings.

Another sign that a disease has occurred in such a bodily constitution I find in the *periodicity of its phenomena*, and chiefly in its *irregular and paroxysmal course*. For even the nervous system, which, next to the brain in proportion to other parts of the body, possesses by far the greatest percentage *of water*, reacts upon a plus of water with an energy commensurate with that which it carries over its reflex influence upon the blood and other organic formations. [The experiences of Rademacher and Hahnemann agree with this also and should stand much higher in the estimation of practicing physicians than the researches of experimental physiology.] I do not mean by periodicity one, two, three, four or eight day exacerbations and remissions, but even those periods during which, for a still longer time, no disease seems to exist, and this extends even over months. Hence for the sake of brevity, I distinguish this constitution

of the body, according to its causes and conditions, as the *hydrogenoid.*

[These people (and children) will suffer most in wet, cold years. The description of the carbo nitrogenoid constitution is omitted, being less definite in the young. The interested reader is referred to text book of Homœopathy, Vol. II, p. 270. Every scientific physician should read that great work of Dr. Von Grauvogl. T. C. D.]

Oxygenoid. Our organism first changes nutritive substances into other chemical combinations, and then effects their combustion. What is no longer oxidizable is excreted. The substances of our bodies the least oxidizable are milk and semen. These stand so low in the scale of oxidation that they are not only used for the nutrition, but even for the formation of other organism.

There is always more C and H given off from the organism in the form of CO_2HO, or other combinations, so that products richer and richer in it remain. The last and richest in Nitrogen is urea. The Carbo hydrates are soon changed into Glycogen, Grape sugar, Inosit, etc., and transformations of that sort are well known. The *neutral* atmospheric oxygen finds sufficient points of attack only when our food and the constituent parts of our bodies, similar thereto, have undergone further transformation. Hence even blood supersaturated with oxygen cannot make more active the destruction of the body. Yet this occurs

at once, as soon as processes are introduced, willingly or unwillingly, by which the transformation of food into those combinations more accessible to combustion is more fully brought about. (§ 27.)

The constitutional conditions to final diseases, in consequence of the increased influence of oxygen, cannot hence arise from an absolute excess of oxygen in the atmosphere, but rather from the resistance of the organic structures against the influence of the oxygen being so much diminished that these structures, from a deficient absorption of oxygen, especially in consequence of the already weakened organs of respiration, are consumed in a far higher degree than in the normal condition of life.

As the nitrogen of the organic structures presents the greatest resistance to the operation of oxygen, still more than their carbon, hence it is the want of nitrogen and carbon which permits the consuming predominance of oxygen. Therefore, we may designate the frequently occurring connection of such conditions, so long as no pathological form has been developed therefrom, as the oxygenoid constitution of the body.

This constitution will be accordingly recognized (1) by want of albuminates and fat (leanness), and especially by the energetic consumption of oxidizable substances wherein (2) the diminished accumulation of the solid constituents of our body, generally connected therewith, are to be brought into calculation, which

constituents must essentially serve to maintain a vigorous life.

The development of this (oxygenoid) constitution might and should very often be prevented, for, according to practical experience, it is often nothing but the degeneration of the hydrogenoid constitution of children and youths protracted beyond the waking up of sexual life. Thus from scrofulosis, not cured, a form of tuberculosis develops; as is well known as from some, neglected chorosis—because the domestic medical care did not recognize the danger, or at any rate did not know how to prevent it. What, moreover, in a very imperfect manner was recognized by the professors under the forms of anæmia, leucæmia, oligocythæmia in the diseased child and not removed belongs here (to oxygenoid constitution) as well as atropha infantum, rachitis, difficult dentition, etc. These pathological forms of the physiological school (or accidentally) are able to scatter, without at the same time removing, all of the conditions of disease, although the uninformed may be deceived with the appearance of cure. From these forms, in later years, even the conditions for hyperæsthesia and consumption arise.

Those who enjoy apparent health, under such conditions, *feel well* or *relieved* in an atmosphere saturated more than usual with nitrogen, even with carbon, with burnt resins and fats, with empyreumatic substances and the like. Such individuals frequently

refuse all animal food, proof that their organs cannot longer elaborate in a concentrated form what they require, and that to them the carbohydrates are more beneficial, as they offer them so many substances slowly oxidizable.

A characteristic symptom of this constitution consists, further, in this, that persons endowed therewith, hours and even days before the weather changes from dry to moist, are uncomfortable. If they happen to be sick their condition is aggravated, also immediately before a thunderstorm; that others do not notice in the least, while the actual fall of rain or snow removes all their pain. They feel best in *foggy weather*, even in the fogs that arise in the forests, especially in an atmosphere not cold, in which men of a hydrogenoid constitution feel the worst, and thereby, as in England, may be driven to the blackest melancholy, even to suicide.

Remedies for the Bodily Constitutions.

(1) If it is true that there is a *hydrogenoid* constitution (alkaline), then those substances must be curative to it which prevent the influence of water upon the blood and liver. Above all others, I reckon Glauber's Salts (*Natrum sulph.*).

If we know that the alkalies essentially promote the operation of oxygen by means of the respiratory process, it is clear that, if we compare the various localizations of the pathological processes in these constitu-

tions and their specific forms with the results of the homœopathic drug provings, that even *Natrum nitricum*, *Natrum carbonicum*, *Acetate of soda*, and *Sal. ammoniac* especially belong here (to the hydrogenoid); moreover, in this series we may mention as nutrition-remedies *Calcarea carbonica*, *Magnesia carb.* and *phos*, *Silicea*, then, and for other reasons adduced, *Iodine*, *Bromine*, *Chlorine*, *Nitric acid*, *Natrum muriaticum*, *Borax*, *Antimony*, *Alum*, *Thuja*, *Carbo*, *Arnica*, *Aranea diad.*, *Pulsatilla*, *Nux vomica* with *Ipecac* or *Arsenic* in alternation, *Conium*, *Apis*, *Spigelia* and animal food.

[The *carbonitrogenous* constitution, which, aside from a relative *lack of ozone*, is rich in nitrogen and carbon (and indicated by Rademacher as appropriate to the copper series), finds in ozone or ozone water itself its most powerful remedy. Here belong also all substances which expel carbon and nitrogen and take up ozone or transfer it to others and excite oxygen, or stand in similar chemical or physical relation to it, viz.: *Copper*, *Phosphorus*, *Sulphur*, *Gold*, *Silver*, *Lead*, *Platina*, *Æthereal oils*, *Turpentine*, *Rhus*, *Dulcamara*, *Chamomilla*, *Lycopodium*, *Bovista*, *Belladonna*, even *Nux vomica*, but given alone, *Digitalis*, *Hyoscyamus*, *Opium*, *Lobelia inflata*.]

The *oxygenoid* constitution, on account of its too active influence of oxygen upon the body, has to seek its remedies mainly in the carbon and nitrogen series, which prevent the oxidation of tissues. Rademacher

here places iron in the first rank. But inasmuch as the *Hydriodate of potash* absorbs all of the ozone I should prefer it to iron. Here the carbons and the alkaloids rich in carbon, have a dual effect, as *Graphites*, *Petroleum*, *Kreosote*, *Benzoic acid*, *Citric acid*, *Acid hydrocyan.*, *Laurocerasus*, and chiefly for inductive reasons antozone water corresponding, indeed, to the iodosmene water, furthermore, *Nitric acid;* many so-called narcotics, especially *Aconite;* moreover, *China*, *Quinine*, *Arsenic*, but given alone, and all metals which are capable of suspending the process of decomposition, hence *Chromium* and *Kali bichromicum.* However, for reasons obvious, *the law of similarity must always decide the special indication.*

If we compare the foregoing list of remedies for the hydrogenoid constitution with those for the excessively alkaline body, and the oxygenoid list with Hering's acid class we find a striking correspondence. The carbo-nitrogenoid list is comparable with Hering's that act both ways. Notwithstanding, a deep insight into bodily conditions and remedies is opened up to the physician.

Grauvogl, Text Book of Homœopathy, vol. ii, 232.

HAHNEMANN ON CHILDREN.

VISIT TO A NURSERY.

[The following article by Hahnemann gives an insight into the life and learning of this great and good man that may be read with interest and profit] :

I lately paid a visit to one of my relatives. Our conversation soon turned upon my favorite subject, children. My fair cousin (her husband very properly left her to speak) talked like a book about physical education, and made me very desirous to see her young family.

She led me to the corridor at the back of the house that abutted on the courtyard, and opened the door of a dark, low receptacle full of disgusting smells, which she informed me was her nursery. A steaming tub, in which dirty linen was soaking, stood in the front of the room surrounded by some low washerwomen, whose unmannerly chattering polluted the ear as the vapor from the dirty hot water did the lungs. The steam, condensed into drops, ran down the window panes.

I expressed to my fair cousin my incredulity as to the utility of this arrangement, and hinted how much the emanations from the clothes that were being washed must deteriorate the air the little ones had to

breathe, how the excessive humidity thereby engendered relaxed all the fibres of our bodies and must consequently be doubly injurious to children of a tender age.

"Do you really mean to say," cried she, "that washing causes any pollution? I'm sure I see no dirt made by it, and a little moisture can't do much harm."

"I allude to the invisible, but very injurious deterioration of the air, the bad effects of which on such delicate creatures as children are you must have heard of."

"Oh!" she replied, "I fumigate occasionally with juniper berries, and they soon remove all impurities."

I now perceived that a learned demonstration of the difference betwixt the properties of azotic gas and pure oxygen, although they differ but slightly in odor and not at all in appearance, would have been quite incomprehensible to my dear cousin, nor could I hope to make her understand how a prolonged sojourn in impure air acted as a slow poison on animal life, especially at a tender age, and how impossible it was that children could enjoy even tolerable health in such an atmosphere, and so forth. Neither did I venture to speak of the quality of humidity that was imperceptibly taken up by the warm air of the room from the scalding water, and equally imperceptibly absorbed by the open mouths of the absorbent vessels in the child's soft body, whereby the natural exhalations were obstructed. Nor did I attempt to prove to

her by the syllogyism in *Barbara*, though I had it on my scholastic tongue, that fumigation with juniper berries and such like things would rather tend to phlogisticate and deteriorate the air, but could never transform the impure air into vital gas. However, as I have said, I luckily suppressed my logical refutation that was about to burst forth, and endeavored to bring forward some *argumentum ad hominem.*

"It is possible," I said, "that I may be mistaken, and that you, my esteemed cousin, contrary to all expectations, are in the right in supposing that the frequent repetition of a washing festival in a nursery, together with the exhalations that arise from the blankets hung to dry near the stove there, may be without any unfavorable influence on the health of children, and I shall give up my point at once when you produce me your dear little children, who doubtless are very lively and stout." "Produce them," she replied, "I cannot, but you may see them yourself back there. I don't know what ails my poor Freddy yonder; he is nine years old, but cannot walk well without his crutches."

At these words a little miserable looking figure crawled towards us with difficulty. His knees were bent inwards and his legs completely destitute of muscle. His head, drawn backwards, stuck betwixt his shoulders; his face was pale and withered; his eyes dull, but projecting beyond the prominent forehead. His large ears stuck out; his nostrils were

expanded; his broad tongue always hung partially out of his half-open mouth. His emaciated arms could scarcely support him on his crutches. He soon returned panting to his little armchair to rest himself after this slight exertion. I involuntarily shrugged my shoulders and heard a deep sigh.

A mixed feeling of gratitude to God and profound pity took possession of me as I called my own rosy-cheeked Fritz to my side and bade him shake hands with this innocent victim of a false and injurious method of bringing up children. My little urchin kissed this poor object affectionately, and asked him what it was he drank out of the large jug beside him. "My afternoon coffee," was his reply, and at the same time he poured out a cup for my boy, who, however, refused it, as he was not in the habit of drinking things he was not acquainted with.

"You do not seem to approve of that," said my cousin, "but what else can the child drink; it is the only thing that seems to do him good; he cannot enjoy anything else?"

"Do him good?" I hastily asked, in a paroxysm of half suppressed, but extreme anger—and I turned away from the odious sight.

Oh! what an inclination I felt to give this unhappy mother a severe lecture, and to show her that a drink which sets our blood in agitation, whilst it exalts the irritability of our muscular fibre to such a degree as in course of time to render it quite lax and to weaken

it so that it trembles—which gradually exhausts our vital heat—which, possessing no nutritive properties in itself, unnaturally stifles hunger and thirst, and which communicates a false overstrained liveliness to its votaries, who are often reduced to the last stage of weakness that, like a transient intoxication, leaves behind it an opposite state of the nervous system—how injurious such a drink must be for the delicate child, endowed as it is with great irritability, and how impossible it is that such a badly-treated creature can become anything but rachitic and cachectic in the last degree—a shriveled diminutive of a human being, for whom death were the most desirable lot.

With all of these evident truths I should have wished to fan the smouldering spark of a mother's love in her breast, but I refrained from so doing because it occurred to me that coffee was the favorite beverage of mamma herself; so suppressing my feelings I mildly gave her to understand that in my opinion coffee should only be an occasional beverage for persons above forty years of age, or employed in certain cases as medicine.

"I suppose, my censorious cousin," was her reply, "you would be for depriving the little creature yonder at the table of her favorite food?"

It was some kind of confectionery which the girl, three years old, who could not stand on her legs and could not be taught to walk, was swallowing with a degree of greediness that excited my disgust and

horror. This pale, bloated creature had a rattling at the chest, slavered at the mouth, had a dull look, a projecting abdomen, and, as I learned, little sleep, and a perpetual diarrhœa, whereby, my cousin assured me, all impurities of the body were discharged.

I begged her to try whether she herself would remain in good health if she were constantly eating sweet things, and if she would not get sour eructations, worms, deficient or excessive appetite and diarrhœa, and, if so, how much more the delicate stomach of a child, who was incapable of taking exercise, and in whom there was a *natural tendency to acidity.*

This seemed to make some impression on her, especially when I begged her to try the strength of my home-made vinegar, which was made of sugar and yeast alone.

"I wish you would advise me what to do for the miserable skeleton yonder in the cradle at the side of the stove; it has constant cold sweats, it does not sleep, and is always crying as if it were on the rack. It has fits occasionally. I wish God would mercifully take it to Himself, it sufferings are so heart-rending to witness. I have already buried three boys, peace be with them! they all died teething. The little fellow has been about his teeth these three months; he is always putting his little hands to his mouth. I only trust he has not got into this state from the evil eye of some bad people, as my mother-in-law confidently asserts must be the case; it was she who tied the scarlet

rags around its little hands. They are said to be good for bewitchment. She also often fumigates with nine kinds of wood."

"What harm," I replied, "could the poor, innocent child have done to the bad people? Where are these bad people that possess the power to make ill by a few words a healthy child, fed moderately on wholesome food and strengthened by exercise in the open air and cleanliness? I am perfectly convinced," I continued, with some bitterness, caused by the sight of so much misery, "I am convinced that if you left off letting the poor child suck such a quantity of chewed bread from that bag, whereby its stomach is made sour and overloaded; if you would clean and dry it often enough, so that all the stench I observe about its cradle were removed; if you would not cover it up so warm, would wash it all over every day with cold water and take it away from the unnatural heat of the stove; if you would send it, or, better take it yourself frequently into the open air, would never give it unwholesome food, nor overload its stomach with the most wholesome — the little creature might still be able to enjoy life, it would not have to whine so much at all the misery you heap upon it and which you attribute to teething and witchcraft; it would become healthy and lively; in a word, it would be to you a source of joy, and not, as now, one of sorrow. Believe me, teething diseases are almost impossible, almost unheard of among quite healthy children; this name is

a mere invention of ignorant persons, and is applied by them to children's diseases which they know nothing about, and the blame of which they lay upon nature, whereas they are in reality the fault of the mothers, the nurses and the doctors! None of my six children have manifested any serious illness when cutting their teeth; when I looked into their mouths I usually found their teeth as I expected, planted along their gums in an even row. Why do we hear these everlasting complaints about the pretended teething diseases of children, for which we have ourselves to blame?"

I went on in my overflowing zeal to give her to understand, in the most decided manner, what a poisonous atmosphere the air of this low, dark, hot room was, filled, as it was, with exhalations of all kinds, and so often with the emanations from dirty clothes washed in it. How well children were worth the trouble of giving them roomy, high, bright, frequently aired and extremely clean rooms to stay in during those hours of the day which they do not spend in the open air, which is quite indispensable for little children.

"Come, Fritz," I added, "let us quit this wretched children's hospital and clear our lungs in the autumnal breeze outside from this bad air. God will provide for these helpless children in the cold earth, including the poor cripple whose sad state causes your tears to flow. Come away."

My cousin was much affected; wished to have more

advice from me; wished to thank me, and so forth. But I hastily took my leave, exclaiming that she had got quite enough to do for the present if she made those changes which my compassionate zeal had induced me to suggest, and I went away with my stout and healthy little Fritz.

[*Hahnemann's Lesser Writings, p. 230.*]

CONGENITAL MALFORMATIONS.

DEFECTS AND DISEASES; THEIR PREVENTION AND CURE.

The following pages are compiled to diffuse information upon subjects of the deepest medical and philanthropic interest. The facts here given throw light upon subjects of great maternal anxiety. To prevent disease is the highest development of the medical art. To prevent malformations and physical defects in the coming generation is an achievement that should arrest the attention of the civilized world. "To do good and to communicate forget not."

To further the study of this important topic I would adopt the words of Dr. Burnett: "Feeling that the experience of one individual in this branch of *Preventive Medicine* can count for but very little, I should be glad to receive from my readers any information bearing on the subject, either as regards man or the lower animals." 1881.

Preventive medicine is a bold step. It is beyond a century since Jenner's attention was called to the fact that vaccination with cowpox would prevent an attack of smallpox, and about the same time Hahnemann evolved the new idea that *Belladonna* would prevent scarlet fever, as then prevailing. He believed that

the remedy that would cure a disease would also prevent the same disease. This fact opened up a wide field for experimentation.

The next most important fact in the line of preventive medicine is given by Grauvogl (1865) in his Text-book of Homœopathy, where medicines were administered to correct antenatal physiological defects.

Preventing Hydrocephalic Children.

He writes as follows:

A young married pair had, two years previously, lost a child from hydrocephalus acutus; the second, then eight months old, was committed to my charge, when the disease had already reached the convulsive stage; it died after a few days.

It devolved now upon me, as the family physician, to solve the problem of protecting the next child from this disease, and thus to remove the conditions under which, both times, the development of the fatal disease had been possible, a problem which everybody knows the physiological school is not able to solve.

Both parents were perfectly healthy, and never sick. Both had blonde hair, thin skin, and blue eyes. The husband spare; the wife of a full habit.* Hence no positive point of support could be gained from either. The wife, however, had nursed both of the children,

* Blondes should not intermarry, both lack bile and red blood that gives health and vigor.—T. C. D.

but without possessing sufficient nourishment for them, as I learned on inquiry, for she was obliged to give them milk, and sugar-water besides and both children were taken sick when they began to *cut their teeth.*

In hydrocephalus the nutrition of the bones is always deficient, and hence, during the period of dentition, this nutrition must be carried on at the expense of other tissues. But the conditions of this deficient nutrition of the osseous system must have been given long before the period of dentition.

I hence stated to the wife that she must not nurse the next child, and that she must, during her next pregnancy, take *Sulphur* 6th one day, and *Calcarea phosphorica* 6th the next, so that she could not lose a third child by this disease.

Sulphur I wished to exhibit as a nutritive remedy favoring the formation of tissue, while *Calcarea phosphorica* was to favor that of the bones.

Five weeks later the woman informed me that she was again pregnant, and asked me for those remedies.

She was delivered at term, and this child, now five years old, remained healthy, as well as a second, now three years old, which was carried the regular term under this prophylactic treatment.

These are not solitary cases, for I have pursued this method for six years in all families in which there has ever been a hydrocephalic child, and with the same good result.

But where I have taken charge, in other families, of children who had already suffered from hydrocephalus none have died during the last seven years, in which time I have given such children, every morning and evening, a powder of the second trit. of *Calcarea phosphorica;* and only such children as I first see in the last stage receive, morning and evening, a few drops of *Argentum nitricum* 6, and every two hours the powder of *Calcarea phosphorica*, and with the best results. At the same time, I have repeatedly convinced myself that, in such cases, one of these remedies alone affords no such relief.

Dr. G. E. Shipman, Superintendent of the Chicago Foundlings' Home, reports that he has proved the value of Grauvogl's prophylactic treatment in several instances. I have also followed this plan with gratifying success in many cases, some so striking that the parents were satisfied that it was the medicines given that ensured the happy results. My plan has been not to give these medicines on alternate days, but to allow one or more days to intervene, and then control the diet of the mother along the lines indicated for acid or alkaline subjects.

On the Prevention of Hare-Lip, Cleft-Palate, and Other Congenital Defects; as also of Hereditary Disease and Constitutional Taints by the Medicinal and Nutritional Treatment of the Mother During Pregnancy.

[Perhaps the most interesting instance of preventive medicine, to the profession and especially to mothers, is where medicine was given to prevent congenital malformations. The experience of J. C. Burnett, M. D., of London, as given in a paper read before the British Homœopathic Congress, 1880, is especially valuable. It shows that what were supposed to be "marks" are due simply to lack of proper nutrition. The full text of the article is here given:]

Mr. President and Gentlemen:—I take the liberty this morning of calling a little special attention to a subject fraught with considerable interest to us as human beings, as men of science, as biologists, and as practitioners of medicine and family advisers.

Should this paper set you a thinking, and call forth a discussion and an expression of opinion, and also elicit the experience of those grown grey in the service of scientific therapeutics, I shall learn much therefrom.

I cannot hope to do more than just suggest a line of thought, but in every exercise some one must start, and so I beg leave to address you a few words on the above subject.

When a good gardener puts seed into the soil, he takes care that it shall be supplied with whatever experience teaches him is conducive to its development and growth; he does so because he knows that the future plant can be thus modified while still in Nature's earthly womb; indeed, we may say the plant never gets beyond this stage of dependency, as it lacks locomotive power.

We all know how chemistry has been successfully applied to scientific agriculture; and any Hodge looking at a poor crop of wheat in a field will be shrewd enough to surmise that the manuring or tilling had been neglected. He knows full well from what he sees in his own cottage plot that the well-dunged, carefully tended portions bear the best crops, and that what grows in this plot is not so readily affected by disease and drought by reason of its more sturdy growth.

Any country schoolboy knows that the poorest apples are on the neglected trees of hedgerows and of neglected grazed orchards, while the fine juicy ones are within the well kept garden.

Who has not noticed the scraggy, stunted appearance of the calves born of the kine that are turned out to common or forest after they cease to give milk?

The future mother-cows lead a hard life and get but poor sustenance, and their offspring are proportionately undersized and ill-conditioned, and have an ancient, wizened appearance generally.

Similarly, in the human subject, the child of the well-fed, well-worked, cheerful, happy woman, living in a sunlit airy habitation, is at birth the finest specimen of its kind.

On the other hand, what a miserable sight do the new-born babes of our courts and alleys, and of the pampered, tight-laced, high-heeled, lazy, lounging carriage-possessing women of the higher classes present! The extremes meet; the poor blanched creature, half-starved, over-worked, shut up in some close, sunless dwelling, brings forth fruit very like that of her pale-faced, over-fed, under-worked, sofa-loving sister of the mansion and of the palace.

And nature is inexorable; look at our bills of infantile mortality if you do not believe it. It is well so; God ordained in his undeviating laws that the fittest should survive, and they do.

Clearly, then, *we may take it for granted that the development of the fruit within the womb can be modified for good and for ill.*

We need not mince the matter; the future human being is made up of four principal factors. First the maternal ovum; secondly, the spermatozoon of the father, which requires, thirdly, a suitable soil for its development and growth. The womb is this suitable

soil. These three factors being given, the blood of the mother supplies the fourth.

In the entire plant and animal world, the choice of the seed and soil lies more or less within ken and control, and faulty specimens get a short shrift, while the more fit are allowed to multiply; or in a wild state the weak are crowded out by the strong, and thus the fittest survive.

In our stock-breeding, the bovine and ovine species are well weeded of their faulty and diseased specimens by the butcher. That innocent individual, called the butcher, purchases the rickety or scrofulous calf of the honest farmer, and John Bull enjoys his *Kalbfleisch* through the Norman medium of veal. Thus nature cares for the survival of the fittest of the bovine species.

With the human species it is very different; faulty specimens of man may not be annihilated for the bettering of the race, and civilized life tends to the protection and fostering of the physically faulty, and hence to the deterioration of the race. This is one great reason why civilization tends to the destruction of society through a gradual deterioration of the race by the preservation of the weak from destruction under the reign of law, and by the collateral power of wealth.

In a savage state the weakling goes to the wall; in a civilized state he may be very rich, and of ancient lineage, and then it becomes most important, from the

particular standpoint, that he should be married and beget offspring. This ramifies all up and down the various social strata. So in the end the barbarians are strong, and then numerous, and then they break in upon a highly civilized community, and a reconstruction of society ensues.

It remains to be seen whether science and art will in the future be able to save civilized society from being overwhelmed by savage hordes.

The true source of national greatness is large families of healthy children; these are the only true "fruits of philosophy." Those other "fruits of philosophy" are rotten at the core, and, like all rottenness, lead by the shortest road to annihilation, having here, however, a preliminary stage of bondage and servitude to the seed of the truly philosophically fruitful.

Surely it would be a strange philosophy that came in the mouths of ranting demagogues; *fruit* is the means of reproduction; *Dawn of Destruction* is what they mean.

Mankind is moved to marriage from purely selfish motives: the pairing takes place for almost every reason except for the physical bettering of the race. No doubt it is well so; the production of the most massive members, or of the biggest brains, can hardly be the chief end of man.

Still nature works wisely in making us all, more or less, worshipers of physical beauty and strength;

and when the period of motherhood comes nigh, perhaps no greater fear is known than that of ill-formed offspring. It may not be often expressed, but if you could look deep into the sacred secrets of the expectant's heart you would know that many are the prayers that fly upwards for the great and blessed gift of a *perfect* child.

"Is it all right?" "Is it *perfect?*"—is very commonly the first question one hears after the newling's *entree au monde.*

To what does all this beauty-worship conduce? To the amelioration of the race. Many an important family has been saved from dying out by a supposedly ignoble *mesalliance.* The British aristocracy is recruited from the ranks of the commoners in more ways than one.

To pretend to inaugurate marriages on racial or scientific grounds is crooked; and although the good old institution known as the family doctor may now and then be asked about the physical desirability of a given projected union, still this is very rare, and when it occurs it usually serves as a cover for other and occult reasons. Therefore, the physician's *role* begins later on. We all know what it usually is.

But to-day I propose directing attention to a subject that has met with but comparatively little notice—certainly with much less than it deserves. I mean the medicinal treatment of the human fruit, while

still within the womb, for the cure of hereditary taints and for the prevention of deformity.

My attention was more particularly directed to the subject some six years since in the following manner:

At the end of the year 1874 I was consulted by a gentleman about his children, the youngest of whom had double hare-lip. He had some confidence in Homœopathic treatment, and was desirous of knowing whether there were any means of getting the wound to heal well after the operation for hare-lip that an able surgeon was on the point of undertaking. I recommended the local application of Calendula officinalis as an excellent and well-established vulnerary, especially to clean wounds. The operation took place, the gentleman used the *Calendula* as directed, and the surgeon, a man of some experience, declared he had never before seen such a rapid healing process or such a nicely-healed surface in any of the cases of hare-lip on which he had operated.

The reputation of *Calendula* (the common marigold) as a vulnerary is very old, but it survives almost exclusively in the homœopathic school, in which it is, as you all know, in daily use.

The next older child than the one operated on had, and has, a slight insufficiency of the upper lip; if it were a little worse it would be hare-lip.

Subsequently the gentleman consulted me in regard to his own health, and after the consultation the conversation fell upon his children, upon the excellent

result of the operation, and the rapid healing of the wounded parts. Then regret was expressed, especially as the child was a girl, as of course the neatest scar can never constitute a perfect or pretty lip. At the best it is only passable, and not particularly unsightly.

Finally he said, "In case my wife should have another child, what would you expect the next to be like?"

I answered, "That cannot be determined; but taking all the circumstances into consideration, viz., that your first child is perfect, that your second child has only a slight defect in the upper lip, that your third child has double hare-lip, and that your wife was in apparently good health with these, all equally, I should expect the next to have hare-lip also, a little worse than the last, and perhaps even cleft-palate."

He further inquired whether anything could be done to prevent it? My answer was, that I knew of no special experience on the subject at all, but as the body fruit could certainly be affected medicinally I should think hopefully of properly directed medicinal treatment of the mother during pregnancy. I promised to do my best, and he said he would let me know if any further pregnancy should occur, and place the mother under my treatment.

The subject took hold of my mind, and I often animadverted upon it. Many remedies suggested themselves, and many plans of treatment; the one that

found most favor with me was to be based upon specificity of seat or local drug affinity. I reasoned that any drug that would specifically affect the upper lip and palate might act as a stimulus to the part if coursing in the mother's blood, and thus bring about complete union of the bilateral parts. But an insuperable difficulty here presented itself—viz., I knew of no such drug with anything like a strongly-expressed affinity for the part. Such remedies as *Kali bichromicum*, *Aurum*, *Iodine*, *Mercury*, *Natrum muriaticum*, *Mezereum*, *Phosphorus*, were thought of, but I did not feel the local affinity idea was workable here.

I then thought of tissue affinity or specificity of histological seat, as worked out in its fullest extent of late years by Dr. Schüssler, of Oldenburg, in regard to disease. I thought that a formative element of the tissue might be wanting, and thus condition imperfect development. If we grow wheat, we must supply its elements, as manure, to the soil, and if we grow tissue we must supply its elements in the mother's blood which is the food of the fœtus; if the wheat just fail to finish the ear, we concluded formative elements are wanting; if the absolute concrescence of the bilateral parts of the human fœtus just fails of completion, we may fairly assume that formative elements are lacking. So I thought. And in order to try to find out *what* was likely to be lacking, I went over embryology a little, and I will ask you to

go over exactly the same ground as myself presently, by giving a short *resume* of the development of the involved parts first, and then show how, and what remedy I diagnosed.

The surgeon who had operated on the little girl, and also the family accoucheur who assisted at the operation, were also consulted upon the hoped-for possibility of preventive treatment in the then future; but these gentlemen laughed at the idea, and said the only thing for it was operation, prevention being out of the question.

But we may reflect upon the fact that it is not at all an uncommon thing in our hospitals, and occasionally in general practice, to treat a pregnant person suffering from syphilis very actively with *Mercury*, and the results are on the whole very encouraging indeed; still, as far as I am aware, it is seldom that any physician attempts the intra-uterine treatment of any other complaint, and even here the *idea* has generally been to treat the *mother* only, or principally.

In thinking the matter over, and endeavoring to find some sound reason to guide me in the to-be-attempted preventive treatment of hare-lip, I was encouraged to hope for a good result from the recorded experience of a few homœopathic obstetricians who tell us of the successful medicinal treatment of the uterus and of the expectant mother herself; for it seemed no great difficulty, theoretically, to modify the development of the fœtus, which grows in the

uterus and is fed with the blood of the mother, seeing that both the mother's blood and uterus can, demonstrably, be modified therapeutically.

Now, although I felt the idea of trying to prevent hare-lip with the help of *specificity of seat* in the ordinary homœopathic sense unworkable, still this lay in the nature of the case rather than in the nature of the thing generally. Thus in those liable to beget offspring with defects or deformities, or displacements of organs, or parts to which we have approved remedies with specific affinities for such organs or parts, we might, and undoubtedly should, find it of eminent service, and also of the careful application of the homœopathic law of similars; also of the tripartite pathology of Hahnemann; and of the constitutional states of Grauvogl, and, perhaps, even of the *Remedia universalia* of Rademacher.*

But to return, let us examine the embryology of the parts involved in hare-lip and cleft-palate.

Biologists tell us that the face is originally formed of a middle portion proceeding from the forehead, or frontal process, and of a lateral portion on each side, derived from the superior extremity of the first visceral arch. These parts are at first separate.

The lateral and the inferior parts, destined to form the superior and inferior maxillary apparatus, are both

* *Remedium universale* is not a would-be panacea or cure-all, but one that hypothetically affects the universe of the microcosm, *i. e.*, not an organ.

derived from the first visceral arch, in which an angular bend appears; the part above this bend being converted into the superior maxillary mass, and that below it into the inferior maxillary apparatus.

The superior maxillary mass, in its growth, approaches the frontal process, and unites with it; a cavity being left between that process and the two superior maxillary masses, which becomes the nasal cavity. By the union of the superior maxillary masses (the superior maxilla and palate bone) of opposite sides beneath this cavity, the separation of the nose from the mouth by the palate is effected.

The mode of development of the face affords an explanation of the abnormal cleft-palate, and the congenital cleft between the upper maxillary and the intermaxillary bones and of those congenital fissures which pass between the intermaxillary and upper jaw, as far upwards as the orbital cavity. Congenital clefts of this kind are thus the *results of an arrest of development occurring during the primitive condition of the parts.*

We may, therefore, infer that cleft-palate is due to lack of a due supply of formative material; the superior maxillary masses ossify indeed, but fail to unite in the median lines. If so it will follow that if the requisite amount of formative matter be supplied soon enough to the maternal blood, it will be given off to the fœtus, and tissued osseous union will take place, and deformity will be prevented.

But the skeleton may unite in the middle, and yet the soft parts fail to do so; and when this occurs with those of the superior maxilla, the deformity known as hare-lip is the result.

We may regard the basis of the upper lip structure as already differentiated into connective tissue, which is indeed the stroma of the whole body, and all of its organs. When, therefore, the soft parts fail to unite in the median line of the upper lip, and we get the ugly defect known as hare-lip, we may conclude that the development became arrested from a lack of one of its constituents *in development or functional power.*

All things considered, I concluded it was, in this case, *lack of lime-life.*

Then the next point was—which salt of lime? Here the psoric constitution of the mother pointed to *Sulphur.*

My conception was not that there was an actual lack of lime as such, but rather a lack of assimilative or developmental power of the lime-function in the sense of Moleschott and of Schüssler, and that struma or psora (= morbid x) was the hindering agent.

I therefore decided on *Calcarea sulphurica*, and believing it was *quality* that was required, and *not quantity*, I determined on the sixth centesimal trituration.

This is how I diagnosed, theoretically, a remedy for *this case* of presumptive defective formation, and this remedy I made up my mind to give if the lady should come under my care.

A little time elapsed, and the husband appeared to inform me that his wife was believed to be *enciente. Calcarea sulphurica*, 6th trituration, one grain night and morning, was prescribed. The lady continued to take it till the end of the seventh month of pregnancy, and during the last two months she took *Lithium carbonicum*, and at full term *she gave birth to a healthy and perfect child.*

In due course a *second* pregnancy took place. The same course of treatment was adopted, and with the same happy result—viz., *a perfect child.*

Since this time I have kept the subject of the intra-uterine medicinal treatment of the human fœtus before my mind; but my experience here has since been for the purpose of preventing, respectively eradicating, constitutional taints and hereditary proclivities. Cases other than those two, for the prevention of defect or deformity, have not hitherto come under my observation.

But this further experience of mine I will refer to again, as an interesting paper, published in the *Practitioner* for December, 1878, by Dr. Thomas P. Tuckey, of County Cork, Ireland, here claims attention. Dr. Tuckey is evidenly an original thinker. The paper is entitled, "On the Preventive Treatment of Cleft-palate and Hare-lip and some further Remarks on the Relation of the Ovaries to the Sex of the child."

Our author tells us that his attention was directed some years ago to the remarkable success which has

attended the Dublin Zoölogical Society in the breeding of lions, and the great immunity which animals born in their gardens, in the Phœnix Gardens, enjoy from various disorders and deformities to which the lion bred in a state of subjection is liable. The most remarkable of these diseases is cleft-palate, which lions in a captive state are very apt to have. Dr. Tuckey believes it was the Rev. Professor Haughton, when speaking before some public assembly, who drew attention to this fact and stated that it was his opinion that the cause of the lions in the Dublin Gardens being born so unblemished was giving the mothers bones which they could crush. This fact very much impressed Dr. Tuckey, as he happened to have under observation a family of several children who were all, both male and female, subject to hare-lips, several of which cases were complicated with cleft-palate, he determined to speak to the mother, who was in poor circumstances, and ask her to let him know the next time she was in the family-way, that he might give her a medicine which would prevent her next child having the same deformity as the others. The poor woman was heart-broken, taking her children here and there to be operated upon, and quite jumped at the idea, and promised faithfully to come and report herself the moment she believed herself to be *enciente.*

This is the woman's family history:

Mrs. H., aged thirty-five, mother of six children,

Every one of her children have had hare-lips, two have also had cleft-palate. The disease appeared not to be hereditary, and she could not call to mind any of her family, or of her husband's family, who have had hare-lips. Is a fine strong woman, but has fearfully crooked eyes; no other deformity. Has always had good health. Her husband, small, but strong and healthy, never has had any diseases while she has been married to him. He and she have both lived all their lives in the country. He is sober, and has always been so. Her first child had simple hare-lip; no cleft in palate; does not remember getting any frights when carrying her children.

A pregnancy occurred; Mrs. H. presented herself, and the doctor prescribed the following mixture:

℞. Calcis phos. ℥j. grs. 20.
Calcis carb. ℥j.
Bicarb. magnes.
Chlorid. sodii.
Sodæ. phosph. aa ℈ ss. M.

To be added to an 8 oz. mixture composed of Gelatine, Gum arabic, Syrup of ginger, and Cinnamon water; 1 drachm three times daily.

As clefts in the palate and lip are said to be due to arrest of development *prior to the end of the third month*, Mrs. H. was at once put on this mixture, which is intended to represent a very rough analysis of the constituents of bone. In any future cases Dr. T. thinks he would grind up the bones of the head of

some animal, and give some of the powder instead of the above elaborately constructed mixture.

The essential parts of this mixture are clearly the Lime, Phosphorus, and Magnesia. The little poly-pharmaceutical performance of adding Gelatine, Gum arabic, Syrup of ginger, and Cinnamon water is not a little amusing.

But to return. The woman took the mixture regularly *until the fourth month;* she went her full time, and was delivered of a girl, without a trace of deformity about her lips or palate; the child was healthy and strong.

[This mixture was a strong alkaline one, and prevented acidity and facilitated child development.—T. C. D.]

Hearing of this case, a Mrs. L. came to seek Dr. Tuckey's advice. She was the mother of eight children, most of whom had cleft-palate and hare-lips; in four of them the hare-lip was double, and more shocking objects of deformity he had never seen. One boy was perfectly repulsive. The woman believed herself pregnant, and was at once put on the mixture. She went her full time, bore a girl without hare-lip, indeed, *but who evidently had had one in utero*, for the lip, though united, was united *crookedly*, and one side was puckered up, as if by a slight and narrow burn.

This is, truly, a most remarkable and interesting case.

I must demur to the statement that the arrest of

development occurring before a certain period necessarily involves the conclusion that treatment in the latter months of gestation would be useless. This is a pure assumption, and based on normal observations. Here we have to do with arrested and *therefore retarded* growth, and hence the nutritional or medicinal treatment should not only be begun early, but continued to the end; and one begun late would still be hopeful of obtaining amelioration, if not of complete normality.

Again, there is an objection to the use of the bone, simply as the lips have not the same constituents as the bones, and in the same proportions; so if we are to give pulverized heads we must give the lips too.

But we, happily, need neither one nor the other; neither do we need any bulky, cunningly-devised mixture, with nasty or nice additions, to mystify, and obscure, and render our own observations open to objections.

Pure clinical experiment must be with one remedy at a time to be conclusive.

Thus, I may object to Dr. Tuckey's proposition that the phosphates did the work in his cases, on the ground that the tincture of ginger acted as a stomachic, and strengthened his patient's digestions, so that they assimilated more food, and *thus* were the defects prevented. Another might attribute it to the gelatine; a third to the alcohol, a fourth to the cinnamon.

Then this polypharmacy prevents individualizing,

which is the soul of all true progress in scientific medicine.

I was once struck with the extreme beauty of a lady's children, both parents being rather plain, and found that she had been in the habit of using a mixture of phosphorus, iron, and sherry during gestation to keep her strength up. Her own health was seriously injured by it.

I think it will be conceded that it is at least highly probable that the preventive treatment of congenital deformities and defects may be undertaken with good chances of success, and I venture to submit that this corner of the field of practical medicine is well worthy the attention and skill of all physicians, and also of all well-wishers of the race, lay as well as medical.

It will be of surpassing interest to the individuals and families more immediately interested, through having undesirable family proclivities.

There is here great scope for the tissue remedies, especially when dynamized, as it is likely to be qualitatively changed nutritive building material that is required.

No doubt the various cases of congenital defect and deformity differ essentially in their natures, and will require accordingly different remedial or preventive treatment.

This immense field lies fallow ready for the tilling talents of willing workers.

As soon as this is undertaken, facts will multiply, and reliable data will be at hand to guide us.

To draw a line of demarcation between the nutritional and medicinal treatment is not now possible. Undoubtedly some cases will require nutritional treatment solely; others will require medicinal treatment directed to the mother's constitutional crasis; in others, again, a debilitated generative sphere may claim attention. Or a presumable taint in the marital product may call for the principal intra-uterine therapeutic endeavors.

Here I may narrate the following observation: A lady patient of mine was extremely fond of liver, during one of her pregnancies; at least once a week she would partake copiously of it—pregnancy fads are as old as the world. This lady was delivered of a very fine *child that had extensive pigmentation of the forehead*, such as we are wont to see in some ladies during gestation. This brown discoloration gradually disappeared from the baby's forehead in about four weeks. The mother's skin was also in parts very deeply pigmented, but not the forehead.

Hitherto we have referred more particularly to the preventive nutritional and medicinal treatment of defects and deformities; it has, we opine, a certain future.

ANTENATAL TREATMENT.

Perhaps it will now be profitable to consider the subject of disease from the same standpoint.

To start with, we may not do amiss to realize the fact that we get, so to speak, a capital leverage for our therapeutical work, inasmuch as we have a number of months in which to accomplish it. We know from daily experience that numerous diseases can be cured by a *course of treatment* spread over a considerable period of time, but which cannot be modified to any great extent with any *one* given remedy. The various remedies follow one another like steps in a staircase, and they are all needful to reach the top.

Then we have the most favorable physical conditions. Our fœtal patients are not exposed to change of temperature, but have a constant temperature in the best possible medium, and they are pretty sure to take their physic regularly.

Ever since my attention was arrested, as before stated, by the observations of hare-lip, I have sought opportunities of testing the truth of this theory—that the body fruit, while still within the womb, can be nutritionally and medicinally modified at will. Further cases of deformity have not presented themselves, but in general practice I have had some opportunities of observing the beneficial effects of the medicinal treat-

ment of pregnant women for the prevention of various to-be-expected morbid states.

Thus, a lady patient of mine has a good many moles and warts on her person, and her husband a great number of warts, some very unsightly, on his. Considering the frequent observations that warts will, at a more advanced period of life, take on increased action, hypertrophy, and become epitheliomatous, their presence in an individual is not only æsthetically undesirable, but may become the source of positive danger to life; at any rate, they are ugly things at the best. Moreover, both of them are rheumatic and constitutionally strumous. This lady has passed through four pregnancies under my observation and professional care, and during each one I subjected her to a course of treatment with the most happy results. The four children were born with unblemished skins—wartless, moleless, and spotlessly pure.

It may be objected that the treatment had nothing to do with this purity of skin, as the interesting babes might have been equally unblemished, without any treatment at all. Of course, I cannot *prove* the contrary, still—

> "Like genders like, potatoes tatoes breed,
> Uncostly cabbage springs from cabbage seed."

My belief is, and it is based on observation, that those four children would in all probability have all been born with unsightly warts on various parts of

their persons had the mother not been treated to prevent it.

The course of treatment followed was in this wise —*a peu pres.*

Sulphur, generally in the sixth, twelfth, or thirtieth dilution (by preference the last-named), was given as the most certain anti-psoric. This was granted time to act, and then followed *Thuja occidentalis* as *the* anti-sycotic *par excellence.* Lest any specific taint lay in its history, *Mercurius* was given. The lady's teeth are very carious, and hence *Acidum fluoricum* was given for a while; the children have thus far sound toothie-peggies, and teethed normally and without any mediævally superstitious gum-lancing.

Apropos of gum-lancing, if those who still adhere to this barbarous practice would just work up the indications of *Aconite*, *Belladonna*, *Ferrum phos.*, *Kreasote*, *Calcarea carb.*, *Calcarea fluorica*, *Silicea*, *Phosphorus*, and the like, they would soon have, as I have, a *very* rusty lancet, and a very grateful heart, that they no longer need to pain the poor bairns and constitute themselves dreaded objects. Moreover, they would soon satisfy themselves, after a little careful observation, that the gums are not the offending parts, but the unfinished, abnormally constituted *teeth*, and a morbid something lying behind and beyond in the constitutional crasis. *Sapientibus sat.*

A lady, mother of several (five) children, was under my treatment for a chronic internal skin affection;

her husband had formerly been successfully treated by me, for psoriasis of lower extremities, with *Arsenicum*.

The last baby I had treated for eczema while still at the breast, and when it was vaccinated the arm became very seriously inflamed, and the object of anxious care and medicinal treatment. All the five children had had, I was informed, something wrong with the skin, and every scratch with them festered.

The sixth pregnancy occurred, and I treated the lady during the greater portion of it. The principal remedies used were *Psorinum* 30, *Sulphur* 30, *Calc. sulph.* 6, and *Juglans cinerea* 1.

The child came in due course; everything was normal, and the little mannikin was the finest of the lot, and remained for two years with a pure skin, and the vaccination caused no inconvenience. All the other children had had cutaneous affections before they were a year old, and some of them proved altogether intractable.

The child passed from my observations then, but I have heard that it now has "something on its arm," but what I do not know. Supposing it to be a cutaneous affection, the result of the preventive treatment would be that it remained free for the first two years of its life; and moreover, it is by far the finest and handsomest of the six children.

Of course I cannot *prove* that it would have been otherwise if the mother had had no treatment at all.

It was once my duty to treat a conjugal pair, each for the morbus gallicus, that admittedly was a marital acquisition. A pregnancy occurred while only too many unmistakable symptoms were objects of treatment. During almost the whole of the pregnancy the lady was persistently treated with *Mercurius*, *Aurum*, *Stillingia sylvatica*, and the like, with an occasional pause. The unusual term of utero-gestation resulted in the birth of an apparently perfectly healthy spotless child, and, as long as I observed it, it remained so.

No doubt other practitioners are in the habit of treating pregnant women for various ailments, and will be able, from longer experience and greater opportunities than mine, to give more striking examples of its efficacy in regard to the mothers, and perhaps also *quo ad* the offspring.

Having thus gone rapidly over the subject of the prevention of defect, deformity, and diseases by the intra-uterine medicinal and nutritional treatment of the pregnant person during gestation, it only remains for me to apologize for the meagreness of the practical suggestions I am able to offer in the few minutes allotted to me for this paper, and to express a hope that you will freely add hereto in the discussion which is to follow, so that it may be said that I merely give out the text and you, gentlemen, preach the sermon.

[Before reading this paper of Dr. Burnett my atten-

tion was called to the possible relations of cleft-palate in the child and gastric disorders of the mother.

I was called one day to see a mother who had been delivered of an eight months' child about six weeks before. She was suffering severely with gastralgia. I found the case to be one of gastric catarrh and treated her accordingly with the best results. The child was a small one and was put upon milk, as it had difficulty of nursing from the partial cleft in the palate, besides the mother had only a little milk and that I judged not of the best quality.

The general symptoms of this case recalled a similar one that I had treated about ten years before. In that instance the child had not only complete cleft-palate, but also double hare-lip. The gastric catarrh of the mother was cured and a subsequent child was born perfect. It might be of interest to add that the first mother had morbus coxarius when young, and that the second mother was of a tubercular diathesis—the disease being now apparently held in check by homœopathic remedies.

That persistent gastric disorders in the early months of pregnancy must seriously interfere with the nutrition of the child is doubtless true, but whether gastric catarrh alone is responsible for congenital malformations or defects, except in a general way, is a problem worthy of farther attention.—T. C. D.]

HOW TO IMPROVE THE RACE.

A Study of Peoples.

[*Summary of a Lecture on the Principles of Medicine by the Author.*]

Why the tendency to disease in humanity, is the study before us to-day. We must explore the past, we must understand the drift of the present, we must anticipate the future.

In your school days you learned of the five races, Caucassian, Mongolian, Malay, Indian and Ethiopian, Blumenthal's classification of over one hundred years ago. Why five? Anthropologists tell us that climate, locality, helps to solve the race problem. "The black race was developed quite locally by heat and moisture." (Brinton.) The white people are found in the north temperate zone and in the mountains, even in the tropics. It is believed that the other colors are but shades of the original. It was once thought that these races were, and had been ever, distinct and separate peoples, but the more physique, history and climate are studied the unity of origin of the race is now generally believed by scientists. The original color was, doubtless, what we send our patients into the country to get, "a healthy brown."

It is signficant that the word Adam means "brown earth." "Blondes and brunettes" are recognized as only shades of the same race of women.

The problem of height and weight we must also solve. Here again climate has its influence. Let us study peoples who for generations have lived in one locality. Mountaineers are proverbially tall. Why? Premature development, as in hot countries, give us small people. In India the small people are on the plains, while tall ones are found in the "hill country," on the slopes of the Himalaya mountains. These latter are also much lighter in color. I get these facts from Dr. Gangadin, of Calcutta, whom some of you heard lecture on his native country and remember as small of stature. By the way, he was afraid he would be called a negro, he was so dark. These peoples of India do not migrate, and he claimed they had lived there generation after generation for thousands of years.

Most nations are made up of mixed peoples, due to migration, from one cause or another, chiefly war or commerce. National lines are arbitrary and of little value in studying peoples except by the training given, as we shall see.

In limestone sections you will also find tall, large people. The lime in our water and milk (that comes from west of the city) is giving Chicago a crop of tall young people! In new countries where the climate is not too severe, neither too hot nor too cold,

there we find tall peoples. The cause is geological and meteorological. But why tall people on the mountains and short people in valleys? The atmospheric pressure at sea level is, you know, fifteen pounds to the square inch. The higher you go up the less the pressure becomes. At the top of Pike's Peak it is removed one half, so light that the heart cannot keep the brain supplied with blood, and visitors often faint. [I had to lie down up there to breathe, until I learned to keep my handkerchief to my mouth so that I rebreathed concentrated air.] The light pressure gives us tall mountaineers. Another fact you will learn, and that is that small people are, as a rule, precocious. Perhaps because they are precocious they are small. Tall boys and girls are, as a rule, slow in maturing, mentally and physically, and are the long-lived people. We are not surprised to learn from early history that "there were giants in those days," and forty to sixty years of age before they were fathers. "All of their days" were more than four score and ten.

Weight is also largely a question of locality, and food. Where the air is moist, as at the sea or below the sea, as in Holland, people absorb moisture and are fleshy. Some years ago a man fasted forty days in this city; I notice that he lost a pound a day except during the rainy days, when he lost none. In other words, he absorbed a pound of water that day. This question of increase of adipose has

several answers. I solved it to my own satisfaction twenty years ago, and you will find the facts in a little book * you should read, for you will often be asked, "Doctor, how can I get fleshy?" The answer might be: "Take liquid food."

Temperament is another classification of humanity that must claim our attention. We must know its practical value. Dunglison (medical dictionary) defines temperament to be "a name given to the remarkable differences that exist between individuals, in consequence of the variety of relations and proportions between the constituent parts of the body. The ancients, way back in the days of Galen, held that temperament is conditioned on the preponderance of one of the four humors then generally admitted—blood, lymph, bile, and black bile—giving rise to a sanguine, lymphatic, bilious (choleric) and atrabilious (melancholic) temperament. The idea of the existence of certain of these humors has been banished, yet the influence of some, as of the blood, lymph and bile, is still admitted by many. Too much influence has, doubtless, been assigned to temperament in the sense in which it was formerly, and still is, generally understood, although there can be no question that difference of *organization* occasions a difference in the activity of the organs." We might put it the other way, that a difference of the organs occa-

* How to be Plump, or Talks on Physiological Feeding.

sions a difference in the organization. The ancient humoral pathology, as such, is obsolete; but it contained some truth, as Dunglison admits. You will notice that the nervous temperament does not have a place in the old classification. Most people are of mixed temperaments, and it is rare to find those of a pure temperament.

The *sanguine* temperament is described as athletic and vigorous, of red face and hair and broad of brain, what ethnologists now describe as brachycephalic. These people are of medium stature and great workers. They have large hands and hearts—belong to the conquering race. The red blood glands (spleen, etc.) are in them well developed. They live on nitrogenous food.

The *lymphatic* persons you recognize as largely developed below the belt. They are great drinkers, as well as eaters. The picture I show you is that of a physician, now of a watering place, who weighs 300 pounds. In reply to a question how much water he drank, he said: "I do not know, but I take a quart pitcher to bed with me and it is emptied by morning." He is not troubled with constipation, his bowels "move regulary *twice* a day," as they should, to relieve that water-logged system. In this temperament the lymphatic absorbent glands are extra active.

The *nervous* temperament, well developed, presents us with the other extreme. Whether tall or short, they are thin, delicate skin, grey eyes and large head,

usually well developed from the ears forward. The forehead, in fact the whole head, is large, but not usually broad. In children they give us a "hatchet face," with feeble vitality. This temperament is developing at an alarming rate, especially in the cities. "Weaker and wiser" is written all over them. These are the prococious, brainy peoples wherever found. Hahnemann was of this temperament.

The *bilious* or motive temperament, as it is sometimes called, points to a well-developed liver. These people are usually well developed, of dark hair and eyes and have great endurance. They usually have long heads, perhaps from the brain sinuses. Ethnologists class them as dolichocephalic.

The classification by nationalities will follow temperaments largely. The Germans tend to the lymphatic, and the French to the nervous temperament, due, doubtless, largely to climate and modes of living. In America the tendency is towards the nervo-bilious temperament, perhaps due to the climate, mode of life and mental activity. That will explain the tendency to dyspepsia in this country which, years ago, was foolishly attributed to "yellow biscuit." That started a craze for white bread, which you know is chiefly starch. To supply the system we must also have meat or nitrogenous food. Our grain then, as now in, Dakato gave yellow flour. With whole wheat bread we get nitrogenous food. The drift is to-day wisely back to bread with the color and nourish-

ment of meat. You must do what you can to correct old and bad ideas and prevent abnormal temperamental development.

There is another classification that we must understand. This time it is of sick people. A noted army surgeon of Bavaria, Germany, Dr. von Grauvogl, a close student of humanity, detected that certain sick people were worse in cold, damp weather, living near standing water, and that fish did not agree with them. These he classed as *hydrogenoid.* They were better in dry, positive, electric weather.

Another class were worse in dry weather, enjoyed cold, even wet weather, and food that was loaded with oxygen. This class he termed *oxygenoid.*

A third class that consumed much carbo-nitrogenous food, and clogged the system thereby, he described as *carbo-nitrogenoid.* These classifications will help you in a dietetic way and also therapeutically. You should all study Grauvogl's Text Book of Homœopathy.

You remember Hahnemann's classification of the causes of *chronic* diseases: syphilitic, sycotic and psoric diatheses.* In our clinic you see many broken constitutions due to the former. To-day most diseases are supposed to be due to micro-organisms, as Hahnemann claimed a hundred years ago. You will not overlook the rheumatic, warty, second class. Grauvogl would class them as hydrogenoid. Some years

* *Vide* Organon and Chronic Diseases.

ago (1873), in a study of sick children, I found them easily divisible into two divisions, which I termed acid and alkaline, depending upon the relative activity of the acid or alkaline digestive organs. Autopsy revealed in the former a large stomach and a small mahogany liver, while in the latter the relative size of the organs were reversed. This division enabled me to "see right through children," and to select the food needed and the class of remedies for each. You will find it elaborated in my work on Pædohygea. I have lived to see some of these two classes of children reach maturity. Those I have treated I endeavored to bring to the normal alkaline condition. Health is the golden mean.

The effort to harmonize these various classifications has resulted in consolidating them into two, as follow: In one class may be found the acid, oxygenoid and nervous and sanguine temperaments, while in the other list we may find, I think, the alkaline, hydrogenoid and lymphatic temperamente—perhaps bilious as well. These two classes you can detect at a glance. This aids in diagnosis. The lymphatic body may be acquired (see How to be Plump). Thirty years ago I was classed as nervo-bilious, weighing 130 pounds. I passed a rigid military examination in '61, being (5 ft. 5 in. high) of fair proportion. Now I weigh nearer 200 pounds and would be classed, perhaps, as lympho-nervo-bilious. The acid class are believed to suffer with spinal anæmia, while the alkaline sub-

jects suffer from hyperæmia of the nerve centres. In the former class we find a tendency to visceral inflammation including one form of tuberculosis, in the latter the other. Here also are met many cases of cancer cachexia. Let me impress upon you the fact that we can do much by hygiene, diet and medicine to control and often to cure the disease tendency in humanity.

The causes of disease you will find classified as predisposing and exciting. We have been studying the former, the undercurrent. These we may control, as you will learn. The other predisposing causes we will consider at another lecture. I cannot dismiss this part of our study without a practical suggestion. Physicians are conservators of the race. You can begin part of your work now. We can do much along the line of bringing peoples up to a healthy standard. Likes beget likes. Blondes should not marry blondes, and vice versa. The temperaments should be mixed. Healthy children and peoples are of mixed temperaments, chiefly of the three. The bilious and lymphatic give vigor. Nervous temperaments should not intermarry, neither should the lymphatics. Extremes are the bases of disease—predisposing thereto —and are to be avoided.

We hear much of the degeneracy of the race and the "survival of the fittest." In these days of wise physicians and much learning we may modestly assume the role of "medical advisers" and take the

high and honorable position of family physician, whose noble prerogative it is to "heal the sick" and "to *improve the race.*"

CHILD STUDY.

[*An Abstract of a Paper by the Author.*]

We read and hear much about "child study," as if it was something new. Every one should study children. Most people do in one way or another. But to make this a new department in the public schools is another matter.

Children have an individuality and must be developed and managed accordingly. Some are timid and need encouragement. Others are dull and ugly, and these have to be stimulated and controlled. Other children are rushers and try to control the school or class and home. To understand how to manage these boys and girls of various ages requires tact. All do best when governed by a sense of justice. To help to understand these various children and how best to manage them great help was found by the author, when a teacher in the long ago, in the study of phrenology as it was then understood. All the discoveries in brain physiology have confirmed the general ideas advanced in craniology. There is, however, a vast desert in brain territory yet unexplored. How the brain develops or should develop is a problem not well understood, and it would seem that the common school is not the place to institute the scientific study

of the physiological psychology of the child. It is a good thing for the universities, pedagogical schools, the colleges for physicians, and especially the chair of children's diseases to institute something of the kind.

This study should interest every mother, every teacher, every physician, and every statesman. Neither can carry this out alone and reach any practical conclusions. The mother may think her Johnnie is a darling; he is so loving, so affectionate. The teacher's verdict is that he is a stupid little brat. The Sunday-school teacher may think that he is a good little boy, while the physician finds a weak stomach, a delicate chest, catarrhal nose, and, on the whole, a pampered, imperfectly developed child.

There is a physiological basis for mental development that we must all know more about before much can be definitely taught as solid psychological fact. The progress along this line during the century has not been great. The study has been along central and objective lines. On the post-mortem examination of the brains of children of various ages it has been found that they are harder at the base along the blood vessels and toward the top of the head, according to the age of the child. The top of the infant brain, in fact all but a small part of the base, is like a mass of jelly. If it is a fact that the brain comes into activity from the base and then develops backward and forward along the sulci and finally on the dome, it would seem that the training and educa-

tion of the young brain should be along these lines also.

Put a tape measure around the head of a new-born infant. It may measure fifteen inches, at the school age the head should measure twenty or more inches. How has this come about? In what direction has it developed—backward, forward, or sidewise? Only the mother and family physician can tell. During the first four years is the best time for child study. The physician can record the physical measurements, and the mother can record the character of the child as it unfolds, or possibly is developed, both it is believed. The soft mass was moulded, and will develop the hereditary type, while the subsequent growth may be developmental. The acid child will appear precocious. It will be very forward, while the large alkaline child may seem stupid, but give it time.

How the brain develops depends upon (1) heredity, (2) education by the mother and family and associates, and (3) the condition of the health—chiefly of the digestive organs. I have made quite a study of child development for thirty years, and believe that defective nutrition is responsible for the abnormal condition of many children. It may seem a little singular, but there is no established standard for children in America for the various ages. In Germany, France, and England they have attempted it. Insurance companies in the United States do not accept

even their standard of height and weight. [See How to be Plump for weight and height.] Children of Chicago who drink milk from the lime-stone regions west of the city grow taller than those who drink milk from the marshy (sandy) region to the south and east of the city. Children that take much liquid food will increase in weight over those who are always on the go and live on dry food. The outlines of the body tell little about the development of the brain and mental activity. The condition of the heart has much to do here, as well as the respiratory capacity and activity. These facts the family physician could furnish. He is supposed to keep tab on the child development from birth on up during all the weeks, months, and years of life. He doubtless could do more along these lines were he given full control as medical adviser.

Neither the school board nor the board of health should try to usurp the place of the family medical adviser. It is not as well for the family, the city or state.

The boy with a weak heart will live in "fear and trembling all his days." The brain will not get blood enough to keep the average in class. The boy with a vigorous heart may be equally as listless and as poor a scholar because of the diversion of his mental activity away from school studies. These children cannot be managed or instructed by the same methods. A sharp word will arrest the weak heart

for a moment and the child will act stupid. He *needs* gentle, sensible encouragement to do his best. The rushing heart of the vigorous boy will make him confused. He will act stupid. His attention must be captured and held by side studies that are side lights. Teachers have discovered this and old principals and teachers have established certain landmarks to judge scholars by, and have been successful. Some teachers manage the lower grades better than the upper, for they know how to capture and hold the attention. They use many objective methods and do not depend upon one sense alone. Hearing in a child is a poorly developed sense. Other children rebel at dictatorial methods that younger brains, less developed brains, do not notice.

To govern and instruct are the two difficult problems in teaching. Here the parents' aid may help make or mar the child. Then the teacher has the child, say, six hours a day. She should see that the physique does not suffer. Along the lines of nutrition and exercise she can do much. A growing child is a plant—it needs and must have plenty of water. If a bird, a young cuckoo, weighing three ounces, consumes two and one-half ounces of food a day, how much should a child weighing forty pounds (and three feet tall) consume? The first food of the child is 80 per cent. of water. A growing child should drink every half hour. If it does not it will lose in weight and lack in brain and mental activity. A

growing child must have oxygen from air and water. Shut off the oxygen and the child gets drowsy. The lungs should have an oxygen bath as often as the child drinks. The best way to drink in oxygen is by deep breathing, taking them at least three times a day or oftener, three or more times in succession. The breathing should be taken standing, rising on the toes as the air is inhaled through the nose. Children should be taught to breathe only through the nose.

The study of child development is one of the greatest problems of the age. It should interest statesmen and all people. There should be a national bureau established for this purpose. It might be made a part of the Agricultural Department, as children are both vegetables and animals of the highest types.

All could help, but the expense of "child study" should not be saddled upon the taxpayers of any one municipality. The State or Nation should take it up for the good of the present and future generations. Let us do what we can to improve the race. "The proper study of mankind is man."—*Pope.*

INDEX.

A

Acetic acid indications, 75
Acid vs. Alkaline children, 17
Acid tendency, 22
Acid child appearance, 22
" " development, 22
" " diet for, 34
" " hygiene of, 43
" " pathology, 29
" " remedies for, 48
" " tendency to, 22
Acidity, natural tendency to, 93
" how to prevent, 32
Acids, effects of, 18, 48
Aconite indications, 50. 59
Actea racemosa, 74
Adam, a brown man, 128
Æthusa indications, 74
Ailanthus indications, 68
Alkaline drugs, effects of, 49
Alkaline child, a study of, 17
" " appearance, 22
" " diet for, 34
" " pathology, 30
" " remedies for, 48
" " tendency, 23
Altitude, high, effect on man, 129
Alumina indications, 64
Ammonium carb. effects, 64
Americans, temperament of, 132
Anæmia, spinal effect, 134
Antenatal diseases, 97
" diet, 25
" impression, 118
" treatment, 121
Antimonium crudum effect, 59
" tartaricum effect, 73
Apis, effect of, 73
Argentum in hydrocephalus, 100
Argentum effects, 65
Arnica effects, 50, 73
Arsenicum effects, 59, 77
Aurum effects, 65

B

Baptisia effects, 77
Baryta carbonica effect, 65
Belladonna effect, 65
Benzoin acid effect, 60
Bile composition, 18
Bowel diseases, remedies, 51
Blondes, milk of, 26
Brain diseases, 50
" remedies, 50
Bromine effect, 60
Bryonia effect, 59
Brunettes, milk of, 26
Burnett on congenital defects, 101

C

Cadmium effects, 72
Calcarea carb. effects, 66
" phos. effects, 99
" sulph in harelip, 113
Calendula in wounds, 107
Camphor, effects of, 75
Capsicum, effects of, 60
Carbones, 74
Carbo animalis effects, 74
Carbo vegetabilis effects, 74
Carbon in body, 80
Carbo nitrogenoid constitution, 86
Carbo nitrogenoid remedies, 86
Causes of acidity, 25, 93, 134
" alkalinity, 26
" height and weight, 128
Causticum effects, 66
Cepa effects, 60
Chamomilla effects, 75
Chest diseases and remedies, 50
Chemical action of drugs, 53
" rules for drugs, 54
China, effects of, 66
Chlorine effects, 73
Cicuta effects, 76
Citric acid effects, 73
Cimicifuga effects, 74
Cina effects, 75
Child development, remedies in, 119
Chronic diseases causes, 133
Cleft palate causes, 98, 112
" prevention, 101
" in lions, 115
" and gastric catarrh, 126
Cocculus effects, 78
Coffea effects, 75
" in children, 91
Colocynthis effect, 77
Cold and acids destroy infants, 18
Congenital defects, 97
" deformities, 99
" malformations, 97
" " prevention, 101
Congenital malformations cured, 113
Constitution carbo nitrogenoid, 86, 133
Constitution hydrogenoid, 80, 133
Constitution hydrodenoid remedies, 85
Constitution oxygenoid, 82, 133
Constitution oxygenoid remedies, 86
Contraria diet law, 34
Cuprum effects, 66

D

Dakota flour, value of, 132
" " development, 29
" " expression, 29
Development of acid children, 22
Development of alkaline children, 24
Disease tendencies, 97, 135
Division of children, 17
" people, 134
Diet, law of, 32
Dulcamara effects, 66

Drugs, classified, 53

E

Elements of longevity, 129
Electrical action of drugs, 53
Electro-negative drugs, 54
" positive, 54

F

Face, how developed, 111
Family physician stands high, 136
Fat, how to get, 130
" Hollanders, 129
Ferrum effects, 71
Food problems, 32
" " in acid, 34
" " in alkaline, 39
Fish, why disagree, 80
French, temperament of, 132
Fluoricum acid effect, 74

G

Gastric catarrh in alkaline, 30, 47
Gastric catarrh in malformations, 126
Gastritis in acid children, 29
Gelsemium effects, 73
Germans, temperaments of, 132
Giants, cause of, 129
Graphites effects, 60
Grauvogl's constitutions, 80, 133
Grauvogl on hydrocephalus, 98

H

Hahnemann on children, 88
" diseases, 133
Harelip, Calcarea sulphur, 113
" how caused, 113
" prevented, 114
" treatment for, 107
Health the golden mean, 134
Height and weight, 128
Hellebore effects, 66
Heredity, laws of, 122, 128
Hepar sulph. effects, 77
Hereditary diseases prevented, 101
Hering's division of drugs, 53
High altitude, effects of, 129
How to hold alkaline child, 44
Hygienic directions, 43
Hydrocephalic children, cause, 98
Hydrocephalic children, prevention, 98
Hydrocephalic children, Calc. phos., 99
Hydrocephalic children, Sulphur for, 99
Hydrocephalus, remedies for, 100
Hydrogenoid constitution, 80, 133
Hyoscyamus effects, 77

I

Ignatia effects, 66
Iodium effects, 60
Ipecac effects, 78
Iris effects, 78

J

Jatropha effects, 72

K

Kali bichromicum effects, 78
Kali carbonicum effects, 67
Kali phosphoricum effects, 67
Kreosotum action, 78

L

Lactic acid effects, 61
Lachesis effects, 78
Laws of diet, Contraria, 32
" for remedy selection, 48
Ledum effects, 78
Lions, cleft palate in, 115
Lithium carb. effects, 67
" in harelip, 114
Lobelia effects, 78
Longevity elements, 129
Lycopodium effects, 67

M

Magnesia carb. effects, 67
Manganum effects, 71
Malformations, congenital, 97
Male issue and salt, 76
Marriage rules for, 98, 135
Mercurius effects, 68
Mezereum effects, 61, 76
Milk of different mothers, 26
Mother's marks, 119
Muriatic acid effects, 61

N

Nationalities, causes, 132
Natrum carb. effects, 68
" muriaticum effects, 76
" sulph. effects, 68
Niccolum effects, 71
Nitric acid effects, 61
Nitrogen in body, 83
Nursery, a visit to, 88
" unhygienic, 89
Nux moschata effects, 78
Nux vomica, 68

O

Opium effects, 76
Original researches, 17
Osmium effects, 70
Oxalic acid effects, 72
Oxygenoid constitution, 82
" diseases, 84
" remedies, 86

P

Palate, cleft, causes, 101
" " in lions, 115
" " prevention, 101
" " treatment, 114
Platina effects, 74
Palladium effects, 69
Pathological peculiarities, 29
Peoples, a study of, 127
Periodicity in the hydrogenoid, 81
Petroleum effects, 72
Phosphorus effects, 62
Phosphoric acid effects, 62
Physicians conserve the gall, 135
Pike's peak air, 129
Plumbum effects, 69
Podophyllum effects, 62
Preventive medicine, 97
Prevent acidity, 32
Preventing hydrocephalus, 98
Precocious children, 129

Prophylactic treatment, 101, 97
Psorinum effects, 79
Pulsatilla effects, 62

R

Race, black, climatic, 127
" classification, 127
" colors, 127
" healthy, 127
" how to improve, 135
" only one, 128
" white, climatic, 127
Remedies, acid, 59
" alkaline, 60
" for constitutions, 85
" indications, 59
Rheum effects, 77
Rhododendron, 69
Rhus tox. effects, 63
Rules for maternal feeding, 33
" " selection of acids, 48, 53
" " selections of alkalies, 48, 54

S

Salt prevents male issue, 76
Sanguinaria effects, 69
Selenium effects, 70
Sepia effects, 79
Skin diseases remedies, 51
Shipman, Dr., on preventing malformations, 100
Silicea effects, 63
Short people, cause of, 128
" " of India, 128
" " of Holland, 129
Spigelia effects, 79
Spinal anæmia, 134
" hyperæmia, 135
Spongia effects, 79
Stannum effects, 69
Staphisagria effects, 63
Stramonium effects, 78
Strontium effects, 70
Sulphur effects, 70
" preventive, 89
Sulphuric acid effects, 64

T

Tabacum effects, 70
Tall children, why, 128
" people, why, 129
Tartar emeticus effect, 78
Throat remedies, 50
Tellurium effect, 71
Temperament, bilious, 132
" causes of, 130
" classification, 130
" lymphatic, 131
" nervous, 131
" sanguine, 131
Thuja effects, 64
Tuckey, Dr., on harelip, 114

V

Veratrum alb. effects, 77
" viride effects, 50, 77
Vulnerary calendula, as, 107

W

Weather, cold, effect, 80
" damp, effect, 80
Weight causes, 129
" and height, 128
" of infant, 45

White bread defective, 132
White, Prof., on action of acids and alkalies, 48

Y

Yellow biscuit, cause of, 132
Yellow biscuit, craze against, 132

Z

Zinc effects, 77
Zoological gardens, lions in, 115

X1001 Duncan, T.C.
D91 Children, acid and
1900 alkaline. 65568
NAME
DATE DUE